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Economic Systems and Public Policy

*Economic Systems and
Public Policy: Essays
in honor of Calvin
Bryce Hoover*

*Edited by
Robert S. Smith and
Frank T. de Vyver*

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Foreword

The twelve essays in this *Festschrift* were written to honor Calvin Bryce Hoover, James B. Duke Professor of Economics and formerly Chairman of the Department of Economics and Business Administration and Dean of the Graduate School of Duke University. The authors were at one time students of Professor Hoover during the forty-one years he has taught at Duke. Most of them have made careers of teaching, research, and academic administration; but, like Professor Hoover, many have from time to time left the university to accept government service or other non-academic duties. Whether in government, business, or teaching, their varied interests reflect imperfectly the extraordinary range of Professor Hoover's interests and participation in national and world affairs.

Here the editors might stop to expand on the eventful life of the man they seek to honor. Happily, they have been anticipated. In *Memoirs of Capitalism, Communism, and Nazism*, Professor Hoover has recounted his experiences at home and abroad: in Illinois, his native state, in North Carolina, and in Washington, Paris, Berlin, and Moscow. Of this absorbing book the author, who is equally at home in French, Russian, and Latin, might wish us to say, *res ipsa loquitur*.

The publication of the present volume was made possible by the generous gift of one of Professor Hoover's friends, who on this occasion prefers to remain anonymous.

R. S. S.
F. T. DE V.

Durham, North Carolina
February, 1966

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Joseph J. Spengler* *Introduction*

The rejection of any source of evidence is always treason to that ultimate rationalism which urges forward science and philosophy alike.

A. N. WHITEHEAD, *The Function of Reason*

How great calamity can come to man through man's perversity.
SOPHOCLES, *Antigone*

The argument for liberty, in the last resort, is indeed an argument for principles and against expediency in collective action.

F. A. HAYEK, *Constitution of Liberty*

Economic *Festschriften* often are repositories of good papers subject to neglect—a neglect that will diminish with their indexing in the near future. They also reflect, as a rule, some of the major interests of the scholar in whose honor they are prepared. The present collection is no exception. It mirrors the scholarly interests and rich experience of a scholar whose happy, wholesome, and industrious youth was spent on the irretrievably idyllic side of the sundering historical watershed thrust up by World War I and much of whose adult life has been actively involved in the revolutionary epoch generated by that war and fully triggered off within little more than a decade after the world had been made “safe for democracy.”

During these years his work, as educator, and his domestic, foreign, and quasi-military service to the United States brought him into contact with many of the world's “great, temporarily near-great, or notorious historical figures” and provided him with the rich experience reflected in his writings.¹ The richness of this experience I can only suggest. In 1917 military service interrupted his undergraduate education, finally completed in 1922 after several years of farming and followed by acquisition of the doctorate, university teaching, and extensive research. In 1929 he went to Russia for a year, the first of a number of trips devoted to the study of that nation's economy, polity, and social

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¹ I have drawn on Professor Hoover's *Memoirs of Capitalism, Communism, and Nazism* (Durham, 1965).

organization. In 1932–1933 he lived in Germany and saw Hitler come to power. After his return to the United States he was involved in several New Deal undertakings. Upon the approach of World War II he was associated with preparatory activities and then with OSS and its predecessor. With the close of hostilities, he participated in the fixing of German reparations, the planning and administration of Europe's economic reconstruction, and, upon the outbreak of war in Korea, in war-related service. Whether he, with other academics, will again be called to emergency governmental service probably turns on whether the United States gets involved in a prodigiously costly and futile land war in Asia, of the sort against which General Ridgway, then Army Chief of Staff, strongly warned a comprehending President Eisenhower in 1954.²

I should note at this point that it is difficult to write an introduction to a *Festschrift*. Readers are apt to interpret what is said as representing the views of the man who is being honored, or the views of contributors to the *Festschrift*. This danger may, of course, be avoided through resort to a dry, factual summary, and possibly an unctuous account of the sort suitable to a rector. Finding this alternative out of keeping with either the rich life of the honoree or the perceptive papers of the contributors, I have decided to react to both the honoree's many brilliant essays and those of the contributors. The views expressed, therefore, are my own interpretations, and not necessarily those of the authors to whose works I am reacting.

As is usual with *Festschriften*, this one only imperfectly and somewhat dryly mirrors the remarkable range of interests and depth of politico-economic understanding of the man it honors. After all, he, more than the contributors to this *Festschrift*, passed through our higher educational system before an abundance of fellowship money, not too discriminatingly distributed, had begun to make the operator instinct ascendant over the scholarly. Moreover, he saw at first hand the effects of vain Western man's stupidity in splitting a potentially stable pre-1914 bipolar world of advanced and underdeveloped nations into a tripolar world—consisting of a somewhat heterogeneous Western World and a probably equally heterogeneous Communist World, each vying for the expensive, unreliable, and not very valuable support of problem-ridden backward lands.

² Matthew B. Ridgway and Harold H. Martin, *Soldier: The Memoirs of Matthew B. Ridgway* (New York, 1956), chap. xxxii.

Economics has always meant more to Calvin Bryce Hoover than mere models lifted from physics and “proofs” pilfered from Euclid. It has meant the analysis of economic life and organization in its vast Plotinian variety of form. It has meant sensibility of the parallels which emerge in the stream of human affairs—parallels which sometimes prove prophetic as did that of Rome under money-lender Crassus at Carrhae in Parthia when contrasted with that of France at Dienbienphu in Indo-China. It has produced sensitivity to charlatans as well as sympathetic understanding of paperback booksellers who naïvely put McNeill’s *Rise of the West* with Wyatt Earp and the Westerns. It has generated a strong sense of the impending—he foresaw the rise of a powerful Soviet Union, the collapse of America’s adherence to the gold standard, the rise of the Nazi system, the rapid approach of World War II, the dissipation of the need for Keynesian concern, the hidden costs of modern welfareism. It has entailed a wide acquaintance with ancient, medieval and modern social and military history—an acquaintance which has made Professor Hoover highly aware of the uncertainties, the seemingly stochastic processes, and the legislative and administrative stupidities which contribute to the shaping of human affairs. Above all, it has made him skeptical of naïve modern economic technocrats who apparently count upon a few mechanical manipulations to banish economic ills and dissatisfaction in the West if not also in benighted parts of the world. It has made him, as a teacher, alert to Henri Poincaré’s observation that while it may be “needful to think for those who love not thinking,” it is mainly necessary for one to choose facts non-randomly and with care, initially those in conformity with well-established rules, and then those which are exceptional, different, possibly counter to a rule, and hence presumably instructive.³

While Professor Hoover’s teaching and research career has encompassed much of the terrain of modern economics even as his administrative and military experience has ranged widely, his concerns have lain primarily in the areas of comparative economic systems (of which he was perhaps the first modern expositor), public policy, socio-economic development, and the relevance of economic theory to these concerns. It is about these concerns that the contributors to this *Festschrift* have written. Their separate contributions may indeed be said to constitute a consensus, albeit not the deceptive sort upon which rhetors and politicians count to serve transient ends. Three essays treat economic systems

³ *The Foundations of Science* (New York, 1929), pp. 365–366.

as such, four have to do with public policy, and five with economic development. In this introduction I shall try to whet the reader's appetite—to suggest the rich content of the papers, though without summarizing them, or (in the vernacular) exploiting their "cream" and leaving the reader to discover only their residual "Blue John."

The topic of comparative economic systems is dealt with by at least three contributors. Henry Oliver's taxonomic review of recent books on this subject indicates a surprisingly large amount of diversity in the manner in which the economic systems of the world are classified and much difference of opinion respecting the content of economic systems and bases for their classification. One infers from this review that economic systems will continue to differ notably not only in reality but also in subjective reflections of this reality. Royall Brandis' paper tends to support this inference and its corollary that no one system will become ascendant. He infers that, while nineteenth-century physics (on which economists drew largely) is of quite limited relevance, one may find support in modern physics and biology for the conclusion that forces making for the divergence of economic systems tend to counter-vail those which make for convergence. Fred Gottheil deals with the prospective withering away of the State, at least in its role as chief allocative agency, in the expanding Soviet economy. This prospective withering away in the contemporary Soviet Union proceeds somewhat differently from that which Marx anticipated; it depends "ultimately upon the convergence of the State's and non-State's or community's preference functions." This process, however, Gottheil finds Soviet theorists holding, entails a movement of the community's preference functions toward the State's. It could be, therefore, that completion of the process of convergence will take a long time.

Four of the papers deal with matters of public policy, but none inquires into the extent to which the desire for administrative power has dissolved that healthy skepticism which in the past kept economics largely free of ideology. Clark Allen examines the knotty problem of "freedom," above all its content and role—a problem of ever greater concern as power-hungry officials increasingly garb the contraction of man's freedom in the deceptive white robes of "public policy." Allen puts into perspective the somewhat diverse views of Frank Knight, Milton Friedman, J. M. Clark, and others. In effect, he examines the continuum of exchange between "freedom" and "non-freedom," together with factors altering the ruling terms of this trade. One com-

pletes Allen's inquiry inclined to several inferences: that economic freedom as well as privacy tends to be positively correlated with the degree to which exchange (including Edgeworthian recontracting) is unconstrained (as it may be when current terms are renegotiable and untoward future effects are slight); and that increase of the freedom of the less fit, the less creative, and the less responsible at the expense of the more fit, the more creative, and the more responsible—now so popular—tends to decelerate economic progress and could presently produce economic stagnation.

Corollary to Allen's paper, and most depressing of all the papers in this volume, is Leonard Silk's very original report, based upon interviews with forty-four leading business executives and reflecting their reactions to the increasing coercion to which Leviathan is subjecting enterprise and the market place—through the replacement of spontaneous order by imposed order and through the ascendancy of administrative "laws" and rules enforced by an encroaching and sometimes capricious bureaucracy.⁴ Silk's finding is all the more depressing in view of the content of recent presidential definitions of business-leader responsibilities, compliance with which may entail pricing as irrational as that imposed by the apparatus of state upon agriculture, the terms of trade between labor and management, and various other exchanges. Silk reports that America's business men remain "instinctively Smithian" and alert to the dangers implicit in "insidious . . . government by guide-line" (i.e., government by lawyers and intelligentsia, often power-hungry and with little understanding of the market mechanism). His findings suggest, however, that business executives, though aware of the interdependence of the components of an economy, fail to distinguish adequately between the prospectively favorable impact of some macroeconomic planning and the probably unfavorable impact of most microeconomic planning. The "captain of industry," one infers from Silk's report, is increasingly becoming a crew-cut organization man, with sensitive antennae pointed toward the abode of the Great White Father, hoping thereby to minimize the adverse impact of government upon his freedom and interests. Silk does not deal with other malignant tendencies, such as the growth of the "military-industrial complex"

⁴ See the Rt. Hon. Lord Hewart of Bury, *The New Despotism* (London, 1929); also Lon L. Fuller, *The Morality of Law* (New Haven, 1964). Even "adjudication is an ineffective instrument for economic management and for government participation in the allocation of economic resources." *Ibid.*, p. 176. See also F. A. Hayek, *The Constitution of Liberty* (Chicago, 1960), chap. xiii.

and its sequel, destruction of industry's competitive capacity as well as its actual and potential consumer-serving power by all-absorbing military and "space" contracts, or the failure of philosophy-less industrialists to insist upon man's unfettered right to indulge in what J. S. Mill called self-regarding action (e.g., cigarette smoking). Nor does he draw parallels between the type of corporate-state economy emerging in the United States and that which developed under fascism.

B. U. Ratchford describes relations between government and central bank in a "free society" or mixed economy. The Federal Reserve System and a number of European central banks exemplify the relations. It is interesting, in view of continuing criticism of the Board of Governors of the Federal Reserve System by those who would make it a mere instrument of White House policy, that competent men have almost invariably insisted upon the System's remaining essentially independent. Presumably they find in an independent bank a major constraint upon the disposition of a prodigal executive and/or an improvident legislature to resort to inflation and thereby evade such controls on spending as economic equity and viability require. Strong support for this view is to be found in Ratchford's paper. Spokesmen for an independent central bank, he also notes, can freely offer expert counsel respecting monetary policy and its accommodation to national rather than to mere executive objectives, especially under non-parliamentary systems of government. Ratchford not only deals with the impact of concrete conditions (e.g., government structure, degree of development of money market, political climate, etc.) upon central-banking, but also lays down a number of general principles compliance with which is essential if a central bank is to function effectively and serve the whole nation.

Juanita and Clifton Kreps review the pursuit of full employment in the United States since the late 1940's. Their analysis of statistical relationships suggests that the economy must grow 5 per cent per year to reduce unemployment to 3 per cent—an objective of dubious value and unlikely to be achieved. Indeed, some of the authorities cited indicate that long before this, skill bottlenecks and structural unemployment will curb the capacity of aggregate-demand-oriented policies to set unemployed persons to work. Unfortunately, the authors' estimates of prospective tax cuts do not allow for the wasting of the nation's substance in the malefic jungles of Asia. Nor does the magnitude of their estimates of the amount of deficit financing

required to achieve and maintain a 97-per-cent employment rate make for confidence in the assumption of government planners that at most very slowly creeping inflation will result. In fact, our authors anticipate average price increases of 3.3–5.5 per cent per year and consequently an eroding of the savings of the aged and a steady worsening of our balance of payments. Their analysis suggests very clearly that efforts to achieve a 97-per-cent rate of employment in an economy permeated by price and wage controls of industrial, union, and governmental origin would cost far more than the objective is worth, particularly when allowance is made for the large number of submarginal individuals among long-time unemployed persons. It is possible, however, the authors show, to make better use of both involuntary and voluntary leisure and thus augment employability as well as the utility of non-work time. It might also be possible to recruit many of the crafts which are currently undermanned, though the demand for their services apparently more than keeps pace with population growth.

Five authors deal with dimensions of economic development, a rubric under which economists are wont to assemble a large fraction of economic “science.” Two papers, those by Charles Taylor and James O’Leary, deal with the financing of economic development.

Taylor’s inquiry into the impact of the “demonstration effect” (sometimes little more than economic “newspeak” for “keeping up with the Joneses”) upon Southern economic development is a significant addition to the literature of regional economics. It focuses, of course, upon the sources and the effects of capital increments, frequently the agent whose scarcity limits economic growth. Taylor finds for the pre-1945 period that while the socio-economic structure of the Southern economy made for a lower propensity to consume than one found in the national economy under *ceteris paribus* conditions, given the actual conditions of relatively low incomes, this propensity was above the national average and the average rate of saving was lower, though tending to rise faster at the margin than elsewhere in response to similar income improvement. Upon the advent of war in 1941, incomes rose remarkably and the socio-economic structure became more fluid, with the result that many feared the South would lack the savings essential to the modernization of its economy after the war. This fear appeared to have foundation right after the war, only to be dispelled by the increase of savings in the 1950’s; the demonstration effect was somewhat blunted, but not enough to make the South self-

sufficient in capital. Fortunately, considerable capital flowed into the South from other regions; it was attracted there by the South's great economic potential, its capacity to serve national markets, and the freedom of its economy from constraints upon the sovereignty of consumers, savers, and investors.

O'Leary compares the financing of capital formation in the United States and the Soviet Union. His task is complicated, of course, by the scarcity and the inferiority of Soviet statistics; after all, a Soviet economist could become an "unperson" should he be indiscreet in publishing or interpreting quantitative materials. O'Leary's data-rich paper reveals the postwar sources and uses of capital funds (exclusive of corporate self-financing, which accounts for most corporate growth) in the United States. Most of these funds are of private origin; in 1965 only 13 per cent of aggregate federal expenditures represented "civil" investment, and the fraction of non-federal government expenditures was not much larger. Free-market forces generally govern the allocation of most of these funds, and increasingly to relatively more risky undertakings. In the Soviet Union, by contrast, allocation is determined by the state, and without the aid of an explicit rate of interest or the marginal efficiency of capital.⁵ Probably only internal financing (in the Soviet Union as in the United States an important source of funds for industry) is somewhat similarly allocated. Because consumer sovereignty is curbed, investment in producers goods has absorbed a much larger fraction of newly formed capital in the Soviet Union than in the United States. Undoubtedly the relatively less rational manner of allocating funds within the producer-goods sector in the Soviet Union somewhat reduced its margin over the United States. Even so, until quite recently, productivity has progressed somewhat more rapidly in the Soviet Union.

Murray Havens deals with the post-1945 restoration of full-employment and economic growth and *élan* in a developed land, Germany, depressed by war and defeat as was Japan, and in much greater measure than other war-torn West-European countries. One is inclined to infer from this study how unpromising is the use, by kudos-seeking bureaucrats and their superiors, of scarce American resources in un-

⁵ "Marxist-Leninist political economy provides the correct theoretical foundation for devising practical ways of measuring the effect of investment," we are told by V. N. Novozhilov. The effect is measured in terms of the "human labour-power" replaced, or of a kind of output-capital ratio. See V. S. Nemchinov, ed., *The Uses of Mathematics in Economics* (London, 1964), chap. iv.

requited attempts to introduce prosperity into the economic swamps and wastelands which make up a significant fraction of the underdeveloped world. Havens believes that macroeconomic planning, together with the calling in (as in Japan) of over nine-tenths of the country's effective stock of money and the removal of microeconomic controls, greatly facilitated Germany's recovery and economic development. For Germany, unlike much of the underdeveloped world, was well supplied with unused productive capacity, entrepreneurs, skilled and disciplined labor, and the ability to form physical, personal, and scientific capital at a high rate. Moreover, adverse experience with the Nazi economic straitjacket probably had done even more than the Freiburg School to restore confidence in an untrammelled market and consumer freedom of choice if not also complete consumer sovereignty. Wages and consumption were held down by the influx of refugees from Communist Germany, by the weakness of the trade unions, and by the opiate of codetermination; in consequence much of the increase in output emerged as gross profit and could easily be transformed into capital under existing depreciation and related rules administered by a government bent upon augmenting productive capacity.

Havens' account of more recent German experience and prospects is less roseate. After all, as David Hume observed, adversity is better suited than prosperity to promote co-operation on the part of individuals, groups, or allies. Inflationary pressure has continued to increase since this paper was completed. Sensitivity of the German economy to movements in other European countries has been intensified, and with it, some believe, the need to trade off increments of national sovereignty for increments of supposed international stability. It remains to be seen, therefore, if Keynesian guidelines prove as effective in the future as Havens finds them to have been in the past.

R. S. Smith inquires into the difficult problem of reconciling divergent national agricultural policies in the Central American Common Market, perhaps a more taxing one even than its correspondent in the European Common Market. For Central America depends upon agriculture for its foreign exchange as well as the subsistence of a population threatening to outstrip the capacity of the region to support it. Regional output is held down by agronomic inefficiency originating in illiteracy, inertia, and excessive population growth, and by barriers to specialization and trade originating in ideological fear of a rational price system. Efforts to co-ordinate grain policy in Central America

remain in the ideational stage, kept there partly by an unlikely twain of fear of hunger and fear of abundance. Efforts to co-ordinate other agricultural policies encounter parallel fears to whose dissipation a multiplicity of conferences makes little contribution. It is hardly surprising, therefore, that Smith is not unduly optimistic.

Craufurd Goodwin deals with a different dimension of economic development; the genesis and spread of economic ideas, many of which serve either to retard or to accelerate the realization of a country's economic potential. His discussion is confined to the Commonwealth, a loose and formerly useful organization destined to erode in consequence of the short-sighted behavior of its most needy and least contributive members, together with the weak and ambivalent behavior of its originators. Emigrants from the British metropole were the major idea-vectors, especially into regions of permanent settlement (Canada, Australia, New Zealand, parts of Southern Africa) where a salubrious climate, excellent economic prospects, and demographic ascendancy over the aboriginal population made quite certain the long-run pay-off of the cultivation and exploitation of potential-releasing economic ideas. Traders, clerics, settlers, and civil servants (the best of whom were rationally assigned to the more promising colonies) predominated among the vectors. They differed in character, attitude, and purpose, however, especially the transient migrants to tropical Africa and Asia, from the prospectively permanent settlers in the temperate world. Even those who migrated to favorable lands differed somewhat in respect of the economic ideas they emphasized and the purposes they stressed. Educational institutions played an important part in the transfer of ideas to Canada and the Antipodes (though not in Tropical Africa), serving initially to diffuse conventional ideas of metropolitan origin and then to translate them into the socio-economic and ethical context of England Overseas and thereby facilitate their implementation. Books, newspapers, and other published media, of course, contributed markedly to the influx of metropolitan ideas and their internal diffusion and adaptation. Remarkable is the policy-dominance of this economic discussion, especially in Canada and Australia, and the similarity of the issues emerging if not also their putative solutions to which purely classical economics presumably could make but limited contribution. It is not surprising, therefore, that native empiricism, undergirded by historical and institutional data, flourished in Canada and Australia (whose relatively urban

milieu also provided a congenial clime for radical proposals of American and European parentage). When one contrasts the response of the stream of British economic ideas to forces of selection operative in England Overseas with the response of the stream of British international and colonial relations and policy to such forces of selection as operated thereon, one is struck how much more closely the latter process approximates a Markov chain process.

Having provided readers with a peek at the themes, if not also an accurate though prismatic suggestion of these themes, I shall close with guessing at additional themes that might have intrigued Professor Hoover. I am sure that he would have been fetched by a paper on the joint historical role of chance, stupidity, and the propensity of political leaders (as of some professors) to create the very Frankensteins that are destined in the end to destroy the societies which these leaders presumably were seeking to perpetuate. Surely empirical data are not lacking in the past or at present, especially in the West. He might have been interested in an account of the misfortunes visited upon liberal societies, old and new, by neglect of the military-political-economic continuum of which Clausewitz wrote so persuasively. He might have been stimulated by the degree to which the foreign relations of particular countries have been affected by neglect of economic considerations and the role of variability in time horizons—a neglect that can give scope to Markov chain processes as noted above. He might also have been interested in a historical account of the costs of failing to keep power tamed—a major objective of James Madison and his fellow founding fathers; or of the costs associated with neglect of the principle of hierarchy and what Herbert Simon calls the architecture of complexity. Or finally he might have been interested in the terrible consequences to peoples who, despite Hume's warning two centuries ago, permit concentration of political power and coercion to emerge in the masquerade of perfectionism and utopianism.⁶

⁶ E.g., see Hayek, *op. cit.*, pp. 7–8, 420.

Economic Systems and Public Policy

Clark Lee Allen* *Economic Freedom and Public Policy*

The tragic element in decision-making arises often, not from the conflict of good with evil, but from the conflict of true values with each other.

JACOB VINER, "The Intellectual History of Laissez Faire"

Future historians may look upon the changes which have taken place in the American economy since 1929 and particularly since World War II as being quite as significant in their impact upon subsequent history as were the changes brought about after the rapid technological advances in England during the latter part of the eighteenth century. This, too, has been a period of unprecedented technological advance, as a comparison of the predictions America's leading scientists made to the National Resources Committee in 1937 with the realities of scientific advance actually realized during the last quarter-century will reveal. The changes in human attitudes, though less apparent to the man on the street, may be found to be no less significant. Of particular interest to the economist is the current uncertainty as to the nature of economic freedom and the role it should play in the determination and execution of public policy. Americans have always been a pragmatic people, little inclined to philosophical speculation about the nature of the state and its proper role in the affairs of man, and they have never had a dogma comparable to the Marxian catechism. If it is true, as Professor Daniel Boorstin has suggested, that Americans have thought that they have had a political dogma,¹ it is unquestionably their profound confidence in the inviolable principle of individual freedom.² To Americans, "liberty or death" is an obvious alternative. If a choice must be made, freedom is more precious than bread.

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¹ Daniel Boorstin, *The Genius of American Politics* (Chicago, 1953).

² Freedom, as one would expect, was most frequently mentioned by respondents in a Gallup poll as the greatest advantage of the American form of government. *Opinion News*, VIII (March 18, 1947).

Americans have, nonetheless, in recent decades embraced public policies which some economists have insisted were restrictive of economic freedoms and would lead inevitably to totalitarianism.³ Professor Milton Friedman in a recent book has set up freedom as the ultimate base for the evaluation of public-policy prescriptions:

As liberals, we take freedom of the individual, or perhaps of the family, as our ultimate goal in judging social arrangements. . . . To the liberal, the appropriate means are free discussion and voluntary cooperation, which implies that any form of coercion is inappropriate. The ideal is unanimity among responsible individuals achieved on the basis of free and full discussion. . . . Unanimity is, of course, an ideal. In practice, we can afford neither the time nor the effort that would be required to achieve complete unanimity on every issue. . . . We are thus led to accept majority rule in one form or another as an expedient. . . . These are the basic rules in a free society: to provide a means whereby we can modify the rules, and to enforce compliance with the rules on the part of the few who would otherwise not play the game. The need for government in these respects arises because absolute freedom is impossible. . . . Freedom is a tenable objective only for responsible individuals.⁴

On the other hand, Professor Frank H. Knight has argued, in quite a different vein, that freedom is essentially an ethical concept, and its use as a criterion for public policy is illusory and cannot possibly serve as a base for an objective evaluation of legislative policy:

. . . our purpose here is to show that the very notion of freedom as a "criterion" is illusory. The theory of maximum freedom, if really followed through, ends in a question-begging justification of whatever human relations happen to exist, and the only way to escape this result and arrive at any ethical judgment is to appeal to an ethical judgment as such. . . . The principle of equal freedom, as expressed through a social order based on free exchange, simply takes us nowhere in the solution of the problems of economic justice. . . . No *discussion of policy* is possible apart from moral judgment. The argument of the body of this paper has shown that an appeal to maximum freedom as a "standard" involves a fallacy. The result is dogmatic acceptance of an existing distribution of power, which is an ethical proposition, a value-judgment in disguise, and an ethically indefensible one. . . . Freedom and coercion are ethical categories, and the only question in regard to which *discussion* can possibly be carried on is the question of what power *ought* to be exercised, or how and under what circumstances.⁵

Many economists have concerned themselves with the nature and significance of economic freedom, and statements of the goals of public

³ Professor Ludwig von Mises and Friedrich Hayek are leading exponents of this view.

⁴ Milton Friedman, *Capitalism and Freedom* (Chicago, 1962), pp. 12–33. For an analysis of decision-making rules in a constitutional democracy, see James M. Buchanan and Gordon Tullock, *The Calculus of Consent* (Ann Arbor, 1962).

⁵ Frank H. Knight, *Freedom and Reform* (New York, 1947), pp. 4–15. Italics in the original.

policy invariably assign to freedom a prominent if not pre-eminent place.⁶ It has been noted that other objectives of economic policy, such as full employment, efficient use of resources, business stability, reduction of income inequality, and satisfactory rate of growth are shared by communist as well as by capitalist writers, but a high regard for political and economic freedom uniquely characterizes the work of the latter. Although the significance of economic freedom is universally acclaimed by Western economists and other social scientists, there is far from agreement as to the nature of freedom. Definitions preferred by some writers are expressly rejected by others; no matter how it is defined, everyone agrees that freedom is good; and in spite of the lack of a consensus as to the nature of freedom, some writers do not bother to define it at all but, nonetheless, use economic freedom as the prime criterion for judging economic policy proposals.

It is axiomatic that definitions are arbitrary, and the idea of a "correct" definition is largely pointless. Although scholars have long realized that they would be handicapped if they were not able to define terms in such fashion as best serves their purposes at hand, there are, nonetheless, obvious disadvantages if a common term has one meaning in one context and quite another in a different setting. And the situation may border on the chaotic if a term with different meanings is commonly used without definition. Economic freedom is such a term, and the difficulty is intensified by the fact that it is, at least in the Western World, a term of encomium. Most Americans, if convinced that a proposed policy would restrict economic freedom, would be inclined to oppose it, even if it were not clear what was actually being restricted or by whom or to what end. It seems not inappropriate, accordingly, to give further attention to the concept of economic freedom, its implications, and its usefulness as a base for public policy in a democratic society.

Freedom and Choice

Although the idea of freedom has both positive and negative aspects, the disposition of most writers has been to concentrate on the negative approach. Freedom is viewed as the absence of coercion; freedom is

⁶ See, for example, Kenneth E. Boulding, *Principles of Economic Policy* (Englewood Cliffs, N. J., 1958) and Edgar O. Edwards, ed., *The Nation's Economic Objectives* (Chicago, 1964).

freedom *from* something. The American Bill of Rights represents a statement of freedoms of this sort. But as important as these freedoms are, it may be argued that there is more to freedom than this. The positive aspect of freedom has frequently been neglected, and sometimes this view of freedom has been expressly rejected.⁷ The inclusion of the positive side of freedom complicates the analysis, but it may be worth exploring the possible positive aspects of economic freedom to determine if this concept can be used to form the base for the evaluation of public-policy proposals.

Political freedom clearly does have both positive and negative aspects. It includes on the positive side the right to vote and to hold office, the so-called political rights. But it must also include on the negative side the absence of coercion by the state in the personal, political, and economic aspects of life. The absence of coercion by the state in the personal realm has commonly been called personal freedom. The absence of coercion of the businessman by the state has sometimes been called business freedom.⁸ And by the same token, economic freedom has been defined, frequently by implication only, as the absence of coercion by the state in the economic realm. Professor Friedman, for example, has written:

A citizen of the United States who under the laws of various states is not free to follow the occupation of his own choosing unless he can get a license for it, is likewise being deprived of an essential part of his freedom. So is the man who would like to exchange some part of his goods with, say, a Swiss for a watch but is prevented from doing so by a quota. So also is the Californian who was thrown into jail for selling Alka Seltzer at a price below that set by the manufacturer under so-called "fair trade" laws. So also is the farmer who cannot grow the amount of wheat he wants. And so on. Clearly, economic freedom, in and of itself, is an extremely important part of total freedom.⁹

Each instance cited by Professor Friedman clearly represents a restriction of freedom. One must presume, since Professor Friedman nowhere in *Capitalism and Freedom* defines economic freedom, that he considers these as examples of restrictions on economic freedom because they affect the economic or business aspects of life. Friedman does define political freedom: "Political freedom means the absence of

⁷ Cf. Knight, *op. cit.*, p. 4 n.

⁸ Calvin B. Hoover, *The Economy, Liberty, and the State* (New York, 1959), p. 349 n. See also J. M. Clark, *Economic Institutions and Human Welfare* (New York, 1947), chap. iv, to which Professor Hoover refers.

⁹ Friedman, *op. cit.*, p. 9.

coercion of a man by his fellow man.”¹⁰ By this criterion each of the instances cited is a restriction on political freedom since it represents coercive action taken by the state. But should not economic freedom mean more than that part of political freedom which relates to the economic aspects of life? Let us consider a broader view of economic freedom and analyze it as a possible criterion for public policy.

Economic freedom may be viewed simply as the availability of alternatives. A man who possesses a high degree of economic freedom is confronted with a wide range of choices. Choice is central to the concept of economic freedom as it is to economic behavior in general.¹¹ A state of total lack of economic freedom would by this criterion be a condition of zero alternatives; that is essentially a condition of absolute slavery. A state of perfect freedom would be a condition of infinite alternatives.

What has commonly been called economic freedom is, according to this view, that part of political freedom which relates to the business aspects of life, e.g., freedom to contract, to produce, to compete, to combine, to spend, to quit a job. Broad as this concept is, it is essentially restrictive in nature and negative in approach. According to the view here set forth, economic freedom may or may not relate to business life; it may or may not relate to restrictions imposed by the state. If alternatives are in fact restricted by the state, both political and economic freedoms are abridged. But economic freedoms may also be restricted by such things as poverty or ignorance of alternatives or lack of training or monopoly.¹²

The association of the idea of freedom with the availability of alternatives appears with some frequency in the literature,¹³ but we are here identifying the availability of choices among alternatives as economic freedom. While it may be argued that there is more to freedom than a range of choices, this does, in fact, constitute a

¹⁰ *Ibid.*, p. 15.

¹¹ Cf. Wilhelm Röpke, *Economics of the Free Society* (Chicago, 1963), p. 14: “To economize is simply to be constantly making a choice from among different possibilities. Economics is at bottom nothing other than the science of alternatives.” Also cf. Lionel Robbins, *Economic Planning and International Order* (London, 1938), p. 4: “. . . and choice is the essence of economic activity.”

¹² Cf. Friedman, *op. cit.*, p. 28: “Monopoly implies the absence of alternatives and thereby inhibits effective freedom of exchange.” Professor Thomas A. Petit has used a definition of economic freedom different in form from the one used here but similar in effect: “If freedom is ‘the absence of obstacles to the realization of desires,’ economic freedom can be defined as ‘the absence of obstacles to economic desires.’” Petit, *Freedom in the American Economy* (Homewood, Ill., 1964), p. 187.

¹³ See, for example, Boulding, *op. cit.*, p. 129.

significant part of freedom, and this part we have labeled economic freedom.¹⁴

Dahl and Lindblom have observed:

The question of what one means by "freedom" is surely one of the most controversial in all human history. One man's idea of freedom is often another man's idea of slavery. In addition, almost everywhere the word "freedom" has come to have an entirely favorable meaning. However much people may quarrel over what they mean by freedom, they usually agree that it is entirely good and never bad. Any way we use the term is almost certain to seem arbitrary and wrong-headed to someone.¹⁵

These authors then briefly consider three concepts of freedom which they find unacceptable for their purposes. Among these is the conception "based on the 'range' of choices open to the individual." This definition of freedom is rejected on the ground that it is conceivable that a man might have a thousand choices, but he might consider all of them to be trivial and none of them satisfactory as a device which would permit him to approximate his goals.¹⁶

There are, of course, both qualitative and quantitative differences in choices available to the individual. If the only choices which a person can make lie in the area of the frivolous, his freedom is restricted regardless of the number of such choices available to him. The freedom to determine whether one will part his hair on the right side or the left is not likely to be rated as significant in determining the degree of freedom which one enjoys. Dahl and Lindblom's position may serve as a warning that an index of freedom cannot be prepared simply by counting permitted choices, but the availability of alternatives does nonetheless constitute an important aspect of total freedom, and we have designated this part as economic freedom.

Viewing economic freedom positively as the availability of alternatives poses the hazard, noted by Knight, of a confusion of freedom with power. If freedom has a positive side—if it is more than the absence of

¹⁴ The familiar demonstration that an income tax permits a consumer to attain a higher indifference curve than an excise tax yielding the same total revenue (see Milton Friedman, *Price Theory* [Chicago, 1962], pp. 57–59) is to be explained in terms of increased economic freedom as here defined; the income tax leaves the taxpayer with a broader range of effective choices than does the excise tax.

¹⁵ Robert A. Dahl and Charles E. Lindblom, *Politics, Economics, and Welfare* (New York, 1953), pp. 28–29. "Karl Mannheim, in his study of the sociology of knowledge, distinguished between the freedom concepts of conservatives and liberals. When the old-style German conservative spoke of 'freedom' in the early years of the nineteenth century, he meant 'the right of each estate to live according to its privileges.' This qualitative definition of freedom was the opposite of the equalitarian concept of the liberals. They thought of freedom as meaning 'freedom from precisely those privileges which to the old-style conservative appeared to be the very basis of all freedom.'" Petit, *op. cit.*, p. 239.

¹⁶ Dahl and Lindblom, *op. cit.*, p. 31.

restraints—it implies sufficient implemental power to make the choices effective.¹⁷ Economic freedom might be defined as the existence of alternatives and power as the ability to avail oneself of the alternatives. A distinction might be drawn between potential and effective economic freedom. Effective economic freedom would then be the availability of alternatives and would assume sufficient power to make effective choices among the alternatives.

Freedom and Policy

The concept of economic freedom is frequently associated with the idea of laissez faire in government, and those who fancy themselves “liberals” in the nineteenth-century tradition conceive of the free society as one in which the economic functions of the state are strictly delimited.¹⁸ In contemporary American usage a “liberal” is usually conceived of as one who believes that government should assume a greater role in economic life; he believes that a greater fraction of our resources should be allocated to and by the “public sector” and fewer by the “private sector” of the economy.¹⁹ Those who describe themselves as liberals in the former sense frequently deplore the emasculation of the term liberal to describe a program of “big government.”²⁰

There is evidence to indicate that both uses of the word somewhat distort the meaning of the term liberal as used by the English classical economists. The extent of the advocacy of laissez faire by the classical economists has frequently been exaggerated by contemporary writers. The list of economic functions appropriate to the state in their view is an impressive one, and such limits to powers of government as were

¹⁷ Professor Boulding conceives power as the first of several “dimensions” of economic freedom. Kenneth E. Boulding, “The Dimensions of Economic Freedom,” in Edwards, *op. cit.*, pp. 107–122.

¹⁸ Cf. A. V. Dicey, *Law and Public Opinion in England* (2nd ed.; London, 1914), pp. 258–259: “The beneficial effects of State intervention, especially in the form of legislation, is direct, immediate, and, so to speak, visible, whilst its evil effects are gradual and indirect, and lie out of sight. . . . Nor . . . do most people keep in mind that State inspectors may be incompetent, careless, and even occasionally corrupt . . . ; few are those who realize the undeniable truth that State help kills self-help. Hence the majority of mankind must almost of necessity look with undue favor upon governmental intervention. This natural bias can be counteracted only by the existence, in a given society . . . of a presumption or prejudice in favor of individual liberty, that is, of laissez faire.” Quoted by Friedman, *Capitalism and Freedom*, p. 201.

¹⁹ Hoover, *op. cit.*, p. 380 n.

²⁰ Friedman, *Capitalism and Freedom*, pp. 5–6.

urged were not usually supported on the grounds of preserving economic freedoms.²¹ The issues of the appropriate functions of the state and the preservation of economic freedom were considered to be quite separate. The "Ricardian socialists" were no less concerned with human liberty than was Ricardo himself. John Stuart Mill, who is famous for his essay "On Liberty," was willing to experiment with limited local collectivism. To the early nineteenth-century economists the issue of socialism was essentially pragmatic and not philosophical in nature. Robert Owen was highly respected by his classical economist colleagues, but his ideas were opposed on the ground that his equality postulate would destroy the necessary incentives for production; his regard for economic freedom was not challenged. Malthus opposed collectivism on the ground that anything which weakened the institution of private property would tend to cause an increase in population.²² Contemporary writers who claim to be "liberals" in the nineteenth-century sense of the term would seem to be the intellectual heirs of Mercier de la Rivière and Bastiat and Herbert Spencer rather than of Bentham and the English classical economists. Laissez-faire ideas did, in fact, dominate American economic thought during the period from the close of the Civil War until the founding of the American Economic Association in 1885, and it was in part to counteract these ideas that the Association was organized.²³ In general,

²¹ Important economic functions were assigned to the state in spite of the fact that it was "the period of the 'rotten-borough' Parliament and the Hanoverian kings whom Thackeray rhymed so spicily:

'Vile George the First was reckoned;
Viler still was George the Second;
And what mortal ever heard
Any good of George the Third!
When George the Fourth to Hell descended,
Thank the Lord the Georges ended.'

Knight, *op. cit.*, p. 3 n.

²² The literature on the ideas of the English classical economists with reference to the appropriate economic functions of the state is fairly extensive. For a discussion of the views of Adam Smith, see Jacob Viner, "Adam Smith and Laissez Faire," *Journal of Political Economy*, XXXV (April, 1927), 198-232; reprinted in Joseph J. Spengler and William R. Allen, eds., *Essays in Economic Thought: Aristotle to Marshall* (Chicago, 1960), pp. 305-329. The views of Smith, Bentham, J. S. Mill, McCulloch, and Senior are discussed in Lionel Robbins, *The Theory of Economic Policy in English Classical Political Economy* (London, 1961), especially Lecture II on "The Economic Functions of the State." For a commentary on the ideas of Locke, Leibniz, Goosen, Jennings, and Hodgskin, see W. Stark, *The Ideal Foundations of Economic Thought* (New York, 1944).

²³ Joseph J. Spengler, "Evolutionism in American Economics, 1800-1946," in Stow Persons, ed., *Evolutionary Thought in America* (New Haven, 1950), pp. 222-227; Henry W. Spiegel, *The Rise of American Economic Thought* (Philadelphia, 1960), p. 185; Sidney Fine, *Laissez Faire and the General Welfare State: A Study of Conflict in American Thought, 1865-1901* (Ann Arbor, 1964). Cf. Petit, *op. cit.*, p. 131: "The concept of laissez faire that prevailed was a peculiarly American one: that government should not regulate or control business in any way, but should instead do whatever possible to aid business in its task of creating wealth."

neither classical nor neoclassical economists have advocated policies of non-interventionism by government in economic life on the ground that laissez faire was necessary for the preservation of human freedoms.

Can economic freedom as here conceived provide the base for economic policy in a democratic society? Have we by redefining economic freedom avoided the difficulties noted by Knight in using economic freedom as a criterion for policy decisions? The answer appears to be in the negative; we arrive at essentially Knight's conclusions, albeit for somewhat different reasons.

1. In the first place, it should be noted that the maximizing of economic freedom is not an acceptable goal for many people.²⁴ The existence of a wide range of alternatives among which the individual must make choices may itself be frustrating to some people and thereby reduce the sum of their happiness. But, unless one decides what is "free" by first deciding what is "good,"²⁵ this does not constitute an argument against defining freedom in terms of a range of choices; it simply suggests that a maximum of freedom does not provide a maximum of happiness for all people. We do not, as a matter of fact, even as an ideal, advocate absolute freedom for all; e.g., madmen and children.²⁶ Maximizing human happiness is not to be equated with maximizing freedom. All men, it may be assumed, yearn for a satisfactory degree of freedom, but not necessarily for absolute freedom. Just as children may be happier in a state of adequate disciplinary control, many adults may prefer an arrangement where the number of decisions which they must make is limited and the range of their choices is somewhat circumscribed. Many who choose a military career may do so in part because they know that they will be relieved of the necessity of making certain choices. Some men in business may prefer positions with less rather than more responsibility. Indeed, if the more responsible positions were not rewarded with higher rates of pay and other prestigious perquisites, these positions might be hard to fill.²⁷ Many workers may join labor unions in order to shift the

²⁴ For the idea that the restriction of the range of choices open to an individual does not reduce satisfaction and may even increase it, see Joseph J. Spengler, "Generalists vs. Specialists in Social Science: An Economist's View," *American Political Science Review*, XLIV (June, 1950), 368.

²⁵ Dahl and Lindblom, *op. cit.*, p. 31.

²⁶ *Ibid.*, p. 30; Friedman, *Capitalism and Freedom*, p. 33.

²⁷ Secretary of State Dean Rusk at a Senate Subcommittee on National Security Staffing and Operations hearing was quoted as saying: "There are those who think that the heart of bureaucracy is a struggle for power. This is not the case at all. The heart of the bureaucratic problem is the inclination to avoid responsibility. One of the reasons that

responsibility for making decisions concerning the improvement of the workers' lot from themselves to the officers of the union. The apathy of a considerable segment of the electorate concerning issues of domestic and foreign policy suggests a limited enthusiasm on the part of many with reference to making choices in the political realm. Efforts to maximize freedom do not provide a key to the explanation of man's behavior either as a political or as an economic animal. A sufficient—and a high—degree of freedom is undoubtedly prerequisite to Western man's happiness, but after a point marginal increments of freedom may be worth less to the individual than their marginal cost. Professor John Maurice Clark has stated, "Therefore, the most basic form of liberty is the liberty to choose how much liberty one will exercise and what guidance one will accept."²⁸

The effect of defining economic freedom in terms of available choices instead of in terms of the absence of coercion is pointed up in the following quotation from Professor Friedman:

The new liberal takes freedom of the individual as his ultimate goal in judging social arrangements. Freedom as a value in this sense has to do with the interrelations among people; it has no meaning whatsoever to a Robinson Crusoe on an isolated island (without his man Friday). Robinson Crusoe on his island is subject to "constraint," he has limited "power," he has only a limited number of alternatives, but there is no problem in the sense that is relevant to the present discussion.²⁹

As we have used the terms in this essay, Crusoe had no problem of political freedom (i.e., "coercion of one man by his fellow man"), but he did have limited economic freedom (i.e., limited alternatives).³⁰ Although, as Friedman has pointed out, historically there has been a

organization seldom gets in the way of a good man is that if a man demonstrates that he is willing to make judgments and decisions and live with the results, power gravitates to him because other people will get out of his way." *Wall Street Journal*, Jan. 24, 1964, p. 8.

²⁸ Clark, *op. cit.*, pp. 85–86. Elsewhere Professor Clark has written: "It is no service to the principle of freedom and individual responsibility to overload the individual with more decisions than he can give proper attention to, or decisions of a character with which he cannot hope to cope successfully." "Aims of Economic Life as Seen by Economists," in A. Dudley Ward, ed., *Goals of Economic Life* (New York, 1953), p. 48.

²⁹ Milton Friedman, "Capitalism and Freedom," *New Individualist Review*, I (April, 1961), p. 6.

³⁰ Cf. Petit, *op. cit.*, p. 188: "[Robinson Crusoe's] most serious problem was the scarcity of his own time. He could not do everything at once. He could not produce the goods he needed to eke out a bare existence and at the same time construct the capital equipment which would improve his productive efficiency and give him a higher standard of living. Crusoe's isolation also forced him to be a Jack-of-all-trades. He had to be a farmer, tailor, builder, and cook just to take care of his daily needs. *This also reduced his economic freedom*, for could he have specialized in one job he would have been able to increase his productive efficiency." *Italics added.*

significant correlation between political and economic freedom,³¹ a fundamental issue arises when a restriction of political freedom (coercive action by the state) results in an increase in economic freedom (a greater range of choices available to the individual). The social security taxes, to which Friedman makes specific objection, like all taxes, are coercive. But if this curtailment of the individual's freedom results in the long run in an increase in his economic freedom (as the term is used here), who can say that total freedoms, political and economic, short-run and long-run, have been decreased? ³² If a professor in the quiet of his study could demonstrate to his complete satisfaction that social security legislation does, in fact, diminish total freedom, but the electorate nonetheless votes to expand social security legislation, whose judgment is to prevail? Freedom must include the freedom to curtail freedom, and the freedom to make mistakes. A social security system imposed upon the public by a totalitarian government would represent a gross infringement of political freedom, but even this might result in an increase in economic freedom, as here defined.

With Friedman's fundamental point few would take issue: "So long as effective freedom of exchange is maintained, the essential feature of the market is that it enables people to co-operate voluntarily in complex tasks without any individual being in a position to interfere with any other." ³³ This is, of course, the strength of capitalism as compared with all forms of collectivism. But particularly as industrial society becomes more complex, areas appear in which solutions provided by the marketplace appeal to many as being less than optimum. A volunteer fire department supported by voluntary contributions of local businessmen may suffice for a community of two thousand, but may prove inadequate for a city of twenty thousand. Satisfactory fire protection will require coercive action by government. The case against a tax for a fire department on the grounds that someone's freedom is curtailed would hardly seem relevant. In many areas such as health, education, economic stability, security, welfare, safety, and protection of life and property, the solutions provided by free ex-

³¹ "History suggests only that economic freedom is a necessary condition for political freedom. Clearly it is not a sufficient condition." Friedman, "Capitalism and Freedom," p. 5.

³² Cf. Robert MacIver, "The Meaning of Liberty and Its Perversions," in Ruth N. Anshen, ed., *Freedom, Its Meaning* (New York, 1950), p. 283: ". . . every law restrains some liberty for some. But in so doing it may well establish some other liberty for some others—or indeed for all."

³³ Friedman, "Capitalism and Freedom," p. 7. Cf. Frank H. Knight, "Conflict of Values: Freedom and Justice," in Ward, *op. cit.*, pp. 219, 226.

change and other voluntary arrangements prove to be less than adequate. Reasonable men may differ as to the necessity for government action in these and other areas, but the appeal to freedom as the criterion for public policy in specific instances is unconvincing. Government action by nature is coercive, and, accordingly, it restricts freedom. Even indirect controls such as monetary policy force producers to sell at lower prices or consumers to pay higher prices than would otherwise prevail. Unless one is prepared to support a full-fledged policy of *laissez faire*, indeed, of political anarchy, he must decide which freedoms should be curtailed and to what extent. And about these matters intelligent and dedicated Americans will disagree.

2. What of the argument that if we abandon economic freedom as the ultimate goal we will inevitably substitute for it ideals of welfare and equality, increase the arbitrary powers of government, and sacrifice the civil freedoms of individuals?³⁴ It should be noted in this connection that during the first quarter of the nineteenth century the dominant social ideal was "a society of liberty *and* equality as it had been conceived by John Locke and propagated by Adam Smith."³⁵ The Industrial Revolution eventually proved these ideals to be irreconcilable. "It became increasingly clear that full liberty would split society into a minority of possessing capitalists and a majority of dispossessed proletarians, while full equality would arrest all progress and ossify economic life. Thus mankind was faced with an awful alternative; should liberty take precedence of equality, or equality of liberty?"³⁶ As a practical matter, since the system of liberty was so much more efficient as a producer of goods, liberty won out over equality.

Yet, in the realm of thought, the intellectual problem remained undecided: both possibilities, in fact, appeared equally forlorn. Without social equality, freedom becomes a mere mockery: "The law," says Anatole France, "forbids the rich as well as the poor to sleep under bridges, to beg in the streets, and to steal bread." Without economic freedom, equality would hardly be worth having: the state, it could be said, should allow all men alike to toil in the public workshops and to eat at the common soup-kitchens.³⁷

Writers since the time of Smith have attempted to work out an acceptable compromise between these apparently irreconcilable principles. Some have turned to the right, and some have turned to the left,

³⁴ Friedman, *Capitalism and Freedom*, p. 5.

³⁵ Stark, *op. cit.*, p. 51. Italics added.

³⁶ *Ibid.*

³⁷ *Ibid.*

and reasonable men have differed as to how much freedom can properly be sacrificed in order to achieve a satisfactory approach to equality. But it appears clear that neither full freedom nor complete equality, even if desirable as ideals, can be achieved without making intolerable sacrifices of one sort or another.

It is true that contemporary liberals have more to say about economic welfare than did their classical counterparts. But the early nineteenth-century economists with their twin goals of liberty and equality—"liberty to achieve the greatest possible production—equality to secure the best possible distribution"³⁸—felt that the greatest welfare of the greatest number would follow as an inevitable consequence; this was the essence of the "invisible hand." But as it became clear that these objectives were to a considerable extent irreconcilable, the economic functions of the state tended to expand, and particular attention was given to the problems of welfare and distributive justice. Whereas historically liberalism had assaulted privilege in the name of individual opportunity, the expansion of the economic role of government gave to all people, and not the poor alone, "a stake in state-sponsored welfare and in state arbitration over uses of land, property, mass communication, and other facilities."³⁹ The prime economic effect of free association is to maximize the efficient utilization of resources through co-operation, specialization, and organization. The attainment of this efficiency objective comes at the expense of augmented inequality in the distribution of wealth. The fact that inequalities of wealth in industrial societies have been kept within manageable limits attests to the effectiveness of remedial social arrangements, primarily income and inheritance taxes, and these are, of course, infringements on individual liberty.⁴⁰

As society, particularly American society, becomes more affluent, the necessity for and the interest in maximum efficiency in resource utilization diminishes. For a primitive economy a high degree of efficiency in resource use may be necessary for survival and certainly for growth. But as per capita incomes rise, other economic objectives take on greater significance. Economists may be able to demonstrate that protective tariffs and feather-bedding practices of labor unions make for inefficient uses of our resources and reduce the aggregate national product, but if the public is convinced that these devices will

³⁸ *Ibid.*, p. 207.

³⁹ *The Economist*, Feb. 8, 1964, p. 512.

⁴⁰ Knight, "Conflict of Values: Freedom and Justice," p. 228: "The final root of the matter here is that any literal individualism is untenable, absurd, and monstrous."

contribute to the solution of the problem of domestic unemployment, they are likely to receive widespread support. And who can say that the restrictions imposed on economic freedom by action of government and labor unions are more reprehensible than those imposed by unemployment?

Even the fundamental concept of compensation on the basis of productivity is ethically suspect.⁴¹ It solves the problem of efficiency by creating problems of justice. One's productivity is a function of the social environment into which one is born, including one's inherited wealth, of one's biological heredity, and only in part of one's own efforts. Personal freedom is a fundamental value of a free society and a cherished goal of social arrangements; economic efficiency is a vital consideration in determining the uses to which resources are to be put. But these are not the only goals of a liberal society, and conflicts between legitimate principles are inevitable. Economic freedom does not by itself provide the key to economic policy. In the final analysis choices and compromises must be made; these decisions are matters of judgment, and frequently rational men will differ as to the nature of the optimum solutions.⁴²

3. Finally, it should be noted that the important freedom is net freedom. Restrictions on freedom may, in net terms, increase aggregate freedom. Rules requiring that one drive on the right side of the road and the taxes to build the roads are restrictive, but without them freedom would be even more restricted. Payments of social security taxes restrict freedom in the use of one's income, but by providing greater security against unemployment and inadequate retirement income may augment net freedom. School-attendance laws circumscribe one's freedom, but in the long run they must contribute to total freedom enjoyed by the community.⁴³ If there is a lack of consensus as to the net effects on freedom of a given policy or whether the loss of

⁴¹ *Ibid.*

⁴² "We here confront an evident and extreme conflict of rights rooted in incompatible ideas of justice itself. The 'right' to the fruits of one's own acts logically includes the right to accumulate and to pass accumulated fruits on to one's heirs, natural or of one's own choice. But every person also has a 'right' to an equal or fair start in life—and beyond that has some claim to a decent human scale of living, regardless of ability to make sufficient productive contribution to provide it. In fact, there can be no question that the strong (and/or fortunate) must help to bear the burdens of the weak (and/or unlucky)." *Ibid.*, p. 227.

⁴³ To the extent that a liberal education increases one's occupational alternatives as compared with a specialized vocational training, it may properly be said that a liberal education increases one's economic freedom. Economic freedom, as here conceived, has the effect of reducing the economic-rent component of one's income; i.e., it reduces the difference between one's best and his next-best occupation.

freedom is adequately compensated by other considerations, the will of the majority after open and free discussion should prevail. Majorities may be temporary, they may be misled, and they may be tyrannical; but in a democratic society the ideas of the majority as to what will augment their freedom are not to be sacrificed to the will of the minority. How to protect minorities from the tyranny of the majority—or vice versa—is a real but essentially a political problem. Professor Clark has written, “If the many are free to choose, they are free to choose wrong as well as right—that is what freedom means.”⁴⁴

It has not been the purpose of this essay to suggest that it is appropriate for the state to assume an increasing role in the solution of economic problems. The purpose has been to indicate that economic freedom, whether considered in the traditional negative sense or in the positive form set forth here, cannot serve as an adequate single base for the evaluation of public-policy proposals. The problems are complex, and they are changing. Professor Stigler was in agreement with this view when he wrote, “The goal of individual freedom does not lead automatically to a cut and dried program of economic policies. Continuing research will have to go into the discovery of the meaning of freedom under changing social conditions.”⁴⁵ Even Professor Friedman, who is probably the leading contemporary exponent of the use of economic freedom as the base for policy prescriptions, comes close to this view when he writes: “That is why the role of the state can never be spelled out once and for all in terms of specific functions. It is also why we need from time to time to re-examine the bearing of what we hope are unchanged principles on the problems of the day. A by-product is inevitably a retesting of the principles and a sharpening of our understanding of them.”⁴⁶ And one might add that when principles are in conflict, compromises must be made.

Again Frank Knight has said it best:

Freedom is the basic value of liberal society, and our most precious possession. . . . But it has limitations, as adamant as the value itself, both in the unalterable conditions of life and still further in other and conflicting moral values, which may be summed up in the vague term “justice.” Consequently, he is no real friend of freedom who attempts to treat it as an absolute principle or cure-all for moral and social maladies and

⁴⁴ Clark, “Aims of Economic Life as Seen by Economists,” p. 24.

⁴⁵ George J. Stigler, “The Proper Goals of Economic Policy,” *Journal of Business*, V (July, 1958) 169–176; reprinted in H. C. Harlan, ed., *Readings in Economics and Politics* (New York, 1961), p. 693.

⁴⁶ Friedman, *Capitalism and Freedom*, pp. 4–5.

discontents. . . . The choice between the openmarket economy and government interference is not one of either-or but of how far, and in what ways. . . . Finally, there is no formula, or principle that can be stated in words, that will indicate definitely how far to compromise between conflicting principles; it is inherently a matter of judgment.⁴⁷

Our conclusion is that there is no easy solution to the problems of freedom and order. Statism is, indeed, a danger in contemporary American civilization, and civilized human values are in jeopardy.⁴⁸ Freedom is a vital aspect of the American way of life, and those who call attention to forces which would destroy it render an invaluable public service. But freedom is not a simple concept which we understand through a subtle process of intellectual osmosis. It has many facets, and the goals of economic freedom sometimes conflict with other legitimate social goals. Freedom is frequently paired with other objectives: freedom and equity, freedom and welfare, freedom and choice, freedom and power, and these sometimes conflicting goals make necessary a consideration of freedom and policy. Some degree of coercion is inescapable in a modern complex industrial society. The issue is not coercion versus non-coercion; the question is how much coercion and by whom and to what ends.⁴⁹ The issues of economic freedom and public policy are the contemporary manifestations of the ancient problem of freedom and order.⁵⁰ Life without either would be intolerable. But the possession of one does not assure the attainment of the other.

⁴⁷ Knight, "Conflict of Values: Freedom and Justice," pp. 229-230.

⁴⁸ Allen M. Sievers, *Revolution, Evolution, and the Economic Order* (Englewood Cliffs, N. J., 1962), p. 158.

⁴⁹ Petit, *op. cit.*, p. 158.

⁵⁰ See Joseph J. Spengler, "The Problem of Order in Economic Affairs," *Southern Economic Journal*, XV (July, 1948), 1-29; reprinted in Spengler and Allen, *op. cit.*, pp. 6-34.

Royall Brandis* *Systems of Thought and Economic Systems*

In all history there is no more striking proof of the power of the human intellect over the material world, than the success of the Communist Party in conjuring into existence an economic and social system, of which the germ had incubated in the mind of a long dead German-Jewish philosopher and which was utterly in opposition to the customs and hopes of the overwhelming mass of the peasant population, in a land where the support of the peasant masses was the first essential to success!

CALVIN B. HOOVER

The backward state of the moral sciences can only be remedied by applying to them the methods of physical science, duly extended and enlarged.

JOHN STUART MILL

The quotations above pose a philosophical problem which economists have, by and large, steadfastly ignored. The problem may be stated thus. The most basic assumption of physical science is that there is only one relevant system to be explored—the system of the natural universe. The laws of this universe are *universal* laws in the most literal meaning of that word. Economists, however, are almost always concerned with a particular system of organized economic activity which is by no means unique. How, then, can we be confident that Mill's edict is correct when it is applied to one of a number of different *man-made* systems?

The alternative to borrowing a system of thought from natural science is, of course, to construct one afresh from the data of human social relations. This challenge is so forbidding that the history of social thought, and particularly of economic thought, reveals constant reliance upon the philosophy of natural science and the discovered regularities of natural science. There has not been consistency in this borrowing, and the basic philosophical questions which are raised by this procedure have been largely ignored. Yet, if this procedure is the

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proper one for economics, we require that all economic systems be demonstrated as derived from the natural universe in accordance with the laws that govern that universe. The question to be answered is, simply: Why do we observe different economic systems originating out of the operation of the same natural environment?

I

Does a particular economic system reflect only the unchanging and unchangeable nature of the men participating in it and of the natural environment which surrounds it? If the answer to this question is "yes," then Mill is right and economics does indeed bear a close affinity to natural science—especially to Newtonian physics. It would follow from this that economists should search for the inexorable laws that underlie human action in the economic sphere and that govern it. One might even have faith that a single universal principle analogous to gravitation in Newtonian physics will be found to unify our understanding of the myriad economic phenomena we observe. Ultimately we might hope to reach a La Placian goal of determining, on the basis of sufficient data about man's present condition, his entire past and his entire future.

The simple and extreme way the case is put, above, would no doubt be considered naïve by twentieth-century economists. That is not to say, however, that much of the twentieth-century development of economics has not been derived from this nineteenth-century viewpoint. This is true not only because economists of today have built on the foundations laid by their predecessors, but also because the same desire to be "scientific" that motivated Mill motivates economists of our day. And the economists' notions of what is "scientific" have changed much less since Mill's day than have their more obvious direct contributions to the development of the discipline. Mill would feel quite at home in reading Robbins' 1932 *Essay*¹ and would experience very little discomfort at a most recent colloquy between Professors Machlup and Samuelson on methodology.²

¹ Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (London, 1932).

² Fritz Machlup, "Professor Samuelson on Theory and Realism," *American Economic Review*, LIV (Sept., 1964), 733-736; Paul Samuelson, "Theory and Realism: A Reply," *ibid.*, 736-739.

II

It is, of course, no discovery of mine that nineteenth-century social science was heavily influenced by the physical science of that day. The situation with respect to biological science is somewhat different and will be discussed a little later.

The key assumptions of nineteenth-century physical science which are pertinent for this discussion were as follows:

1. The physical universe is a perfectly ordered universe. *How* the universe came to be ordered or *why* it was ordered were ruled out of bounds as subjects for scientific investigation. The physical scientist sought only to learn what those rules of order were.
2. As a corollary of this perfectly ordered universe, it was possible to encompass all the phenomena of nature in a single, unified theory. Whether such a theory had in fact arrived in the nineteenth-century version of Newtonian physics remained to be seen, but whether or not Newton and his followers had it right, the important thing was that such a theory must be available. Man only had to find it, if indeed he did not already have it in his possession.
3. Still another corollary of the perfectly ordered universe was that the action of every particle in this universe was determined by law. Whether the actions of a particular group of such particles, when organized together in the form called man, was also completely determined was arguable, violently so—but it is important to remember that this argument was not about the determinateness of the basic physical particle, but only about a particular congeries of such particles. Nor was the use of statistical laws such as the Law of Gases inconsistent with this assumption. The statistical laws were used for convenience only. It was not that the motion of each molecule in a gas was not determinate, but rather that the number of such particles made summation of individual actions an impractical computation task and invited the use of the Law of Large Numbers.
4. A fourth assumption held that physical phenomena were unaffected by the scientist's observation of them. The scientist, that is to say, while in some respects *of* the universe which he studied,

was *as observer* not a part of this same universe. It seemed patently obvious that looking at the moon did not affect this body's path in the heavens. In similar fashion it was assumed that *no* scientific observation affected the thing observed. Consider what complications would result if things were different from this assumption. We would know what we observe, but we would never be able to learn what things were like when we did not observe them.

5. A fifth assumption of nineteenth-century physical science was that the concepts of absolute space and absolute time were meaningful ones. It is of some interest and, perhaps, some significance that the nineteenth-century followers of Newton were much more confident about this than Newton himself. Newton recognized the relative nature of observed motion and was forced, rather uncertainly, to the conclusion that somewhere in the vast universe God must have provided a position from which absolute space and time measurements could be drawn. Two centuries later, however, Newtonian physics had forgotten that Newton had not found a satisfactory answer to the problem of absolute space and absolute time.³

III

It was in the intellectual climate of a physical science based upon these assumptions that economics developed as a well-identified discipline during the course of the nineteenth century. Consider how thoroughly these assumptions—translated, of course, into economic terms—permeated the mainstream of nineteenth-century economic theory:

1. The assumption that the only equilibrium position for a private-enterprise capitalistic system was a full-employment equilibrium. Deviations from this equilibrium could occur only as the result of external forces and such deviations were automatically self-correcting. In sum, the economic system was a perfectly ordered system.
2. The belief that (in Marshall's words) "the general theory of the equilibrium of demand and supply is a Fundamental Idea run-

³ Newton, like Marx's relation to the Marxist, would not have been a very good nineteenth-century Newtonian.

ning through the frames of all the various parts of the central problem of Distribution and Exchange.”⁴ When macroeconomic problems were attacked, the approach remained, in essentials, the approach of demand-and-supply-equilibrium analysis. To the present day, the inability of economists to provide a unified theory encompassing both macro and micro phenomena never suggests to economists that such a theory may be an impossibility, but rather only that they have not found it.

3. The “particle” of economic theory was (and is) the individual. On the determinateness of this individual the whole structure of theory is erected. Demand theory, whether Marshallian or Hickian, beautifully illustrates this point. Important elements of the real economic world which are not individuals are either ignored or assumed to act as though they were individuals. Thus, corporations are either ignored or glossed over, as in national income analysis, or are assumed to act like individuals, as in the theory of the firm. Whether these individuals or pseudoindividuals are determinate like the Newtonian atom or subject to some Principle of Uncertainty like the Heisenberg electron is a matter with which economists seldom, if ever, concern themselves.
4. As long as much of the work in economics was of the “armchair” or a priori type, the relation of observer to observed was not a critical matter. As we turn more and more to investigations of the real world and, especially, in accord with certain suggestions of modern theory, to investigations of plans and expectations (as in consumer surveys and business investment research), serious questions of the effect of observer on the observed pose themselves. In an even more subtle way, it does not appear unreasonable that an increase in understanding of economic relationships and of the economic system itself will lead decision-makers in the economy to act differently from the way in which they would have acted. We may mention investment decisions by those responsible for large enterprises, when these decisions are seen to affect the national well-being, or wage-settlement decisions covering large areas, when such decisions are also seen in the larger context of the national economy.
5. Finally, the Newtonian postulate of absolute space and absolute time finds its economic counterpart in the concept of absolute

⁴ Alfred Marshall, *Principles of Economics* (variorum edition; New York, 1961), p. viii.

prices or an absolute general price level. Walras, Fisher, and those who followed theorized in this framework.⁵

As Jevons summarized it, approvingly, in *The Theory of Political Economy*: "The Theory of Economy thus treated presents a close analogy to the science of Statical Mechanics, and the Laws of Exchange are found to resemble the Laws of Equilibrium of a lever as determined by the principle of virtual velocities."⁶

But Newton's laws are not universal and they are not precise.

IV

What is the situation in present-day physical science? In brief, every one of the basic assumptions I have listed is now either held in serious question or has been rejected entirely as inconsistent with the empirical evidence. The fact that social-science theory, and especially economic theory, still falls heavily under the influence of Newtonian physics must give us pause. It would indeed be a fortunate coincidence if the world-view of nineteenth-century physical science turned out to be the proper basis for developing twentieth-century economic theory.

I wish now to raise a question seldom asked by social scientists. Assuming that physical science has much to offer us in the way of philosophical foundations, to what physical science do we refer? In the last half-century there has been a revolution in physics. This has been as much a revolution in scientific philosophy as in the more prosaic theoretical formulations designed to explain particular empirical discoveries. Furthermore, modern physics is divided into three broad areas and can by no means be called a unified science. These areas are microphysics (the physics of subatomic particles), macrophysics (the physics of astronomical distances and very high velocities), and, finally, Newtonian mechanics, which is now viewed as only an approximation, although, of course, an exceedingly useful one for the physics of the gross world of everyday experience. It would appear to the outside observer that, so far as a unified theory is concerned, micro- and macrophysics are at least as far apart as micro- and macroeconomics. In this, economists, perhaps, can find some comfort.

I shall try to state certain tenets of this new physics and its

⁵ The author has discussed this particular problem in some detail in his "The Price Level and the Value of Money," *Rivista Internazionale di Scienze Economiche e Commerciale*, XII (May, 1965), 401-419.

⁶ (4th ed.; London, 1931), p. vii.

philosophy and suggest how their adoption by economists might lead to a new approach to economic theory. Much of what I have to say may be subsumed under what is usually called "logical positivism," but I am not specifically concerned here with this particular philosophical doctrine. It may be that the road from modern physics to economics must run via logical positivism, but rather than enter into that broad subject I am going to move along a somewhat more direct route.

V

The two developments of the last fifty years which have played a primary role in shaking the philosophical foundations of Newtonian mechanics are the theory of relativity and quantum theory. My exposition here is necessarily brief. Furthermore, I do not pretend to expertness in physics; I can only hope I do not offend too greatly against the physicist's understanding of these matters. For an authoritative presentation the reader is referred to the physicists. They deserve much credit for making the broad lines of their discoveries, methods, and philosophic conclusions available to the non-specialist in the field. There is hardly a leading physicist of the last half-century who has not, in article, published lecture, or book, attempted to explain in reasonably non-technical terms what is happening in physics.⁷

Of all the theoretical developments in physics of the last half-century, Einstein's theory of relativity has received far and away the widest publicity. The theory was devised to explain certain light phenomena that could not be satisfactorily accounted for in the system of Newtonian mechanics. The most striking innovation of the theory was the destruction of the rigid separation between space and time and the

⁷ A bibliographical note may not be amiss here since many economists may not have explored what they take to be a forbidding region. The following works, mostly by physicists, have been particularly helpful to the writer: Lincoln Barnett, *The Universe and Dr. Einstein* (New York, 1952); Max Born, *The Restless Universe* (London, 1935); Percy Bridgman, *The Logic of Modern Physics* (New York, 1927); Percy Bridgman, *The Nature of Physical Theory* (Princeton, 1936); Louis de Broglie, *The Revolution in Physics* (New York, 1953); Sir Arthur Eddington, *The Nature of the Physical World* (Cambridge, 1929); Sir Arthur Eddington, *The Philosophy of Physical Science* (New York, 1939); Albert Einstein, *Relativity* (New York, 1917); Philip Frank, *Modern Science and Its Philosophy* (Cambridge, Mass., 1949); Sir James Jeans, *Physics and Philosophy* (New York, 1943); Pascual Jordan, *Physics of the 20th Century*, trans. Eleanor Oshty (New York, 1944); Max Planck, *The Philosophy of Physics* (New York, 1936); Hans Reichenbach, *The Rise of Scientific Philosophy* (Berkeley, 1951); A. D'Abro, *The Rise of the New Physics* (2 vols.; New York, 1951). The reader should be warned that at the boundaries of physics, especially in the area of philosophical speculation, controversy rages. Some of it makes the Keynesian arguments seem mild indeed.

substitution of a space-time continuum. Thus, space and time became relative concepts, and Newtonian absolute time and Newtonian absolute space were eliminated from physical theory. It would be an error to suppose, however, that this makes "everything relative" and that the underlying philosophy substantiates a purely relative approach to any of the social sciences. This interpretation of relativity can be identified in some recent work in the social sciences and has reinforced anthropological relativism. But the space-time continuum of Einsteinian theory is an absolute, and it is within this absolute continuum that space or time alone exhibit their relative qualities. Furthermore, the speed of light as an absolute is basic to relativity theory.

What might consideration of relativity theory yield the economist seeking deeper theoretical insights into economic activity? The treatment of time in economic theory is neither consistent nor clear. The time period, or lack of time period, in Marshallian partial-equilibrium theory is not the time period of national-income theory. And neither of these time concepts is in accord with that of most business-cycle research. In the last case, business-cycle studies, preoccupation with calendar time and with the periodicity of cycles with respect to the calendar may have obscured more significant economic relationships. It may be that "economic time" varies with change in some other factor, for example, the rate of capital accumulation, just as time in Einsteinian theory varies with the velocity of the observer.

In any event, the concept of time in economic theory badly needs a coherent restatement, and some help may well be obtained from study of the new concept of physical time embodied in relativity theory.⁸

Quantum theory owes its origin to the physicist Max Planck and has developed contemporaneously with relativity theory. Quantum theory is concerned with microphysics and was put forward to explain empirical discoveries in subatomic physics which could not be accounted for in the Newtonian system. Summarization would be presumptuous, but a few general remarks may be helpful.

At bottom, in quantum theory, is Planck's "quantum of action," a very small but finite unit. According to Planck, energy can be emitted from a radiating body only in discontinuous fashion, the minimum amount being one quantum. Furthermore, larger amounts must be

⁸ An interesting attempt to relate the time concept of modern physical science to what we may call "literary" time has been made by Hans Meyerhoff. See his *Time in Literature* (Berkeley, 1955). Problems concerning the time concept also arise in history and in psychoanalysis.

multiples of this basic unit. This theoretical notion of discontinuity in nature, which appears to be borne out by certain empirical data, has great significance for our ideas on causality. Once energy is no longer viewed as continuous, difficulty arises in devising a causal chain for happenings in the physical world.

This difficulty becomes more disturbing when we learn that the individual atomic actions do not exhibit a predictive cause-and-effect relationship.

The Heisenberg Principle of Uncertainty has played an important part in the development of modern physics and has broad philosophical implications. It was devised to account for certain inconsistencies that had arisen in microphysics after the appearance of quantum theory. First introduced in 1925,⁹ the principle may be stated simply as "the measurement of an electron's velocity is inaccurate in proportion as the measurement of its position in space is accurate, and vice versa."¹⁰ For example, while it is possible to determine the half-life¹¹ of a particular amount of radium undergoing radioactive disintegration, it is not possible, *in principle*, to determine when a *particular* atom will disintegrate. This necessarily shifts physics to a statistical basis and makes our fundamental physical laws depend on the Law of Large Numbers. This has obvious and very important significance for scientific philosophy. No longer is it possible to say that, if one had complete knowledge of the state of the system at one moment, all past and future states would be, in principle, determinate. Not all physicists, Einstein and Planck being the most notable exceptions, have been willing to accept this principle although, at present, their rejection is a matter of faith rather than of demonstrable contradiction. Their objections are best summed by Einstein's well-known remark, "I cannot believe that God plays dice with the world."

One present-day philosopher of science has grasped the significance of this development for the social sciences. Reichenbach says, "In fact, the analysis of causality carried through in physics brings that science much closer to sociology than it ever was before, the recognition that physical laws are probability implications, and not dictates of reason, should encourage the sociologist to formulate laws even when his laws

⁹ Frank, *op. cit.*, p. 291.

¹⁰ Planck, *op. cit.*, p. 62. Strictly speaking, the logical positivists would argue, we should not imply by such a statement that these particles are objectively possessed of the characteristic of indeterminacy. Rather the principle involves a rule as to the use of language. See Frank, *op. cit.*, pp. 179-180.

¹¹ That is, the period of time in which half the atoms present will have disintegrated.

hold only for a majority of instances.”¹² Certainly we could substitute economics for sociology in this statement—and perhaps with even more justification.

The theory of demand, whether developed along Marshall’s diminishing marginal utility path or that of Paretian indifference curves, has always been derived by building on a theory of the individual consumer. In Hicks’s words: “It is necessary in any theory of value, to be able to define just what we mean by a consumer of ‘given wants’ or ‘given tastes.’ ”¹³ Such an approach bears a striking resemblance to the attempt in physics over a period of two and a half millennia to push back to smaller and smaller “building blocks.” And, until the Heisenberg statement of the Principle of Uncertainty, physicists never doubted that the smallest “building block” they might find would be subject to complete determinateness, at least in principle.

There has not been any great difficulty in economics in deciding upon the “consumer” as the ultimate “building block” of the theory of demand. Some question has been raised as to whether an individual or a family is the proper unit, but this problem has never unduly concerned economists. The analysis of the “consumer” has, however, required some rather strict assumptions about the psychology and the economic action of the individual. It was on this ground that the Marshallian theory of demand was attacked and, recently, the indifference curve analysis given a full treatment as a substitute for the Marshallian assumptions regarding the individual consumer.¹⁴ But the determinate actions of the individual consumer remain as the foundation of demand theory.

Why have economists concerned themselves so deeply with the problem of choice by the individual consumer? I would suggest that this concern arises, among other reasons, because of the implicit penetration of economic thought by the philosophy of nineteenth-century physics. We have felt that only by conceiving a fundamental “building block” whose actions are determinate could we build a theory of the market which would be truly “scientific.”

At least three disturbing facts have thus been ignored. One is that some consumers are irrational and probably all consumers act irrationally at times. A second is that there may be only a small number of buyers in the market. The third disturbance is the presence of

¹² Reichenbach, *op. cit.*, p. 309.

¹³ J. R. Hicks, *Value and Capital* (Oxford, 1939), p. 17.

¹⁴ Especially by Hicks, *ibid.*

government as a consumer. None of these facts has been integrated in orthodox demand theory. Nor can they be as long as we insist on a theory based on the existence of a fundamental unit whose actions are determinate and predictable on the basis of the psychology of individual choice.

The introduction of the Principle of Uncertainty frees us from the necessity of using a fundamental unit whose actions are determinate. We might better base our theory of demand on the operation of the Law of Large Numbers. This would leave the Marshallian market demand schedule as before where the number of consumers was sufficiently large. But where the number of consumers is small the demand schedule might well be indeterminate. If this is true, it would be healthy to recognize it explicitly. Furthermore, this might direct attention to areas, such as that of government demand, which are largely ignored at present.

VI

Present-day physical theory is divided into three parts which we may call, for convenience, microphysics, macrophysics, and commonplace physics. Microphysics is marked by quantum theory and the uncertainty relations of Heisenberg. Macrophysics is governed by general relativity theory. What I have called commonplace physics—that is, the physics of the gross physical world which is directly apparent to our senses—is still governed by Newtonian mechanics, but these rules are now viewed as approximations which hold with a high degree of accuracy only as long as we concern ourselves with this gross physical world. Both microphysics and macrophysics converge on the commonplace as we move from the very small, the very high velocity, the very distant, to the phenomena of our everyday world. It should be emphasized, however, that commonplace physics in no sense bridges a gap between microphysics and macrophysics. Such a gap exists, but there has been no successful attempt to bridge it. Whether in principle the gap is bridgeable is a question upon which physicists disagree. In general, it may be said that the younger physicists think it cannot be bridged while the older group of physicists believe it possible to develop a unified theory.¹⁵ All attempts to do so have, however, failed.

¹⁵ On this point see especially D'Abro, *op. cit.*, pp. 106–114.

This division in theoretical physics bears a certain resemblance to the division in economics between micro-theory and macro-theory although here, too, we must be careful not to push an analogy too far. At the least, it is encouraging to know that the physicists have not had any more success than the economists in developing a unified theory.

Two ways in which we might avoid introducing this fundamental conflict of physics into economic theory occur to us: One, we might refuse to accept the idea that what goes on in physical science has a bearing on the development of economic theory. This approach we have laid aside for the purposes of this paper. Two, we might operate on the assumption that economic life bears a close relationship to the gross physical world, and, therefore, Newtonian mechanics and its philosophy are satisfactory. We shall consider this second point briefly.

In our economic relationships we deal in what we might call the gross human world. We are concerned with units of consumers, producers, money, and so forth which do not appear to be reducible below units which are physically apparent to our senses. Therefore, it may be argued that Newtonian mechanics is all we need in economics. I believe this to be much too superficial a view. It is quite true that physicists and engineers do not need relativity theory when analyzing physical matters at the velocity human beings attain nor do they worry about quanta and the uncertainty relations when building a bridge. But it may well be that in "mapping" economic theory on the structure of physical theory, we are more likely to get correspondence if we treat individuals as electrons, say, and the system as a universe.¹⁶

VII

What relevance has all this for economic theory? Schumpeter in his last work takes a stand which implies complete irrelevance. In his words, ". . . economic analysis has not been shaped at any time by the philosophical opinions that economists happen to have. . . ." ¹⁷

With this conclusion, needless to say, this paper is not in agreement. Schumpeter's view presupposes an ability to put aside one's philosophical beliefs while engaging in economic analysis. In effect, it applies that

¹⁶ I believe, therefore, that we run a danger when we ignore this approach in what amounts to dogmatic fashion. Cf. F. H. Knight, "Economics, Political Science, and Education," Jan. 19, 1944 (mimeo.), p. 6: "The first step (in analysis of any subject matter) is to formulate the universal conservation principle—mass, momentum, and energy, quantitatively defined in primary units of space, force, and time. (*Relativity refinements are not in point here.*)" (Italics supplied.)

¹⁷ *History of Economic Analysis* (New York, 1954), p. 31.

one has no philosophy while engaging in economic analysis. This view is very similar to the attitude toward physics of many physicists of the nineteenth century. I would hold rather with Whitehead that it is not a question of whether to carry one's philosophy into a scientific analysis but only a question of *what* philosophy is influencing the analysis.¹⁸

The mechanistic world-view which arose out of Newtonian mechanics and reached its culmination in the nineteenth century largely influenced the course of economic analysis during that period and continues to do so today, long after its abandonment by physical science.¹⁹ I think it more than coincidence that English physicists as well as English economists clung to mechanical models long after they were abandoned on the Continent.

VIII

If we cannot find in an economic theory oriented to Newtonian physics a satisfactory explanation of the observed facts of economic life, is it possible that an orientation to Darwinian biology will be more fruitful in this regard? Professor Spengler's description of "Evolutionism in American Economics, 1800-1946,"²⁰ makes it unnecessary to trace this influence here in detail. While there were differences (primarily less pragmatism and more abstraction abroad) between the American treatment and that of other capitalist economists, the American experience is reasonably representative.

The interconnections of economic theory and Darwin's theory of evolution is a somewhat different story. In the *Origin of Species* Darwin acknowledged formally his debt to Malthus. In his autobiography he goes a good deal further:

In October 1838 [some twenty-one years before the publication of the *Origin of Species*], that is, fifteen months after I had begun my systematic enquiry, I happened to read for amusement Malthus on *Population*, and being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and

¹⁸ See also, for example, Planck, *op. cit.*, p. 11.

¹⁹ See, among others, on this point, Karl W. Deutsch, "Mechanism, Organism, and Society: Some Models in Natural and Social Science," *Philosophy of Science*, XVIII (1951), 230-252; W. Stanley Jevons, *The Theory of Political Economy* (4th ed.; London, 1931), p. vii; John Stuart Mill, "On the Definition of Political Economy and on the Method of Investigation Proper to It," in *Philosophy of Scientific Method*, ed. Ernest Nagel (New York, 1950), pp. 407-440; Karl Pribram, "Patterns of Economic Reasoning," *American Economic Review* (Proceedings), XLIII (1953), 243-258.

²⁰ In *Evolutionary Thought in America*, ed. Stowe Persons (New York, 1956), pp. 203-266.

plants, it at once struck me that under those circumstances favourable variations would tend to be preserved, and unfavourable ones to be destroyed. The result of this would be the formation of a new species. Here, then, I had at last got a theory by which to work. . . .²¹

This seems clear enough, yet very recently an anthropologist published a book on Darwin in which he attempted to show that Darwin didn't know where he got his idea. He *really* got it from the work of other biologists and from geology, that is, from *natural* science.²² After all, to attribute to a social scientist the inspiration for the largest single step biological theory has taken is going too far! Social scientists might well get delusions of grandeur from Darwin's remark.

IX

If one views the physical environment as a constraint on, rather than the determinant of, man's economic activity, he will likely be led to some form of social evolutionism. It is at once clear that production in a physical sense is subject to the laws of nature. The physical efficiency of machinery is subject, for example, to the laws of thermodynamics. Given this physical constraint, one can then argue that social institutions evolve in such a way as to enable man to maximize some goal under this constraint.

If the goal to be maximized is itself produced by the effect of the natural environment on man, we have a pure Darwinian approach. The goal of survival was taken by Darwin to be itself naturally derived. Although, so far as I can determine, Darwin never examined the concept of survival as a goal, we may suppose that he would have taken it to be implicit in the concept of life itself.²³

The use of social evolutionism to explain existing social institutions must go beyond the naïve Social Darwinism of the late nineteenth century. For Social Darwinism in economics assumed that the goal of, and reason for, man's economic institutions was the nature-given goal of survival interpreted in sophisticated fashion as the maximization of the algebraic sum of the positive utility of consumption and leisure on the one hand and the negative disutility of saving and labor on the other hand.

The weakness of the Social Darwinism argument lay precisely in the

²¹ Charles Darwin, *The Autobiography of Charles Darwin* (New York, 1958), p. 120.

²² Loren Eiseley, *Darwin's Century* (New York, 1958), pp. 180-182.

²³ See, especially, chap. iii of the *Origin of Species*.

failure to explain why any particular economic *system* would arise from its inexorable operation. No doubt in any form of economy the fittest will survive. But who are the fittest? and fittest for what? The answers to these questions are, obviously, that those who survive are the fittest and that they are fittest for survival *in that system*. Yet, if the economic system were different, different individuals would be the fittest and would survive. "Survival of the fittest" in this context becomes a tautology explaining nothing.

X

What Social Darwinism needed to explain, if it were to provide a natural explanation of man's economic life, was how economic *systems* evolved, not just what went on within any particular economic system. It is not much of an overstatement to say that the Social Darwinists of the late nineteenth century were impressed with the similarity between a highly individualistic economic system and a jungle. They failed to see that those who survived in such an environment would be those fittest to survive under jungle conditions but not necessarily under some different economic arrangement. Unlike the jungle in which Darwinian biological evolution occurred, however, this economic jungle was itself a creation of man and, from a historical viewpoint, was quite a new creation. Yet, no explanation was offered as to why such an economic environment came into being out of the preceding mercantilistic and medieval worlds.

Marx, on the other hand, did offer a theory of the evolution of economic systems, however vehemently he might have denied Darwinian (or, more particularly, Malthusian) influences on his thinking.²⁴ Furthermore, Marx's accent on classes and the class struggle for survival introduced a social concept quite different from the struggle between individuals ordinarily associated with Social Darwinism. The weakness in Marx's explanation of social development as an evolutionary process (which might be titled "The Origin of Classes") was that there was no evidence in nature or in human history that the evolutionary process ever ended. While the notion of a Hegelian final synthesis applied to society was, no doubt, very appealing philosophically to Marx, the fact remains that there was no evidence to support it.

²⁴ Joseph Schumpeter, as one would expect, stresses this aspect of Marx's work. See his *History of Economic Analysis*, especially pp. 391 and 441.

If we return for a moment to Darwin's thought, the error is apparent. New biological species arose, according to Darwin, as a response to the environment and this environment included, among other things, *the existing species*. Thus, whenever a new species arose, the environment of all living things was, to some extent, altered. We would, therefore, expect the struggle for existence in this new environment to produce still another new species and so on ad infinitum. Looked at in this light we see that Marx's thought contained a fatal self-contradiction. New classes (e.g., capitalist and proletariat) arose out of an evolutionary process. These new classes provided a new environment in which the class struggle for existence went on in turn to produce still other classes. There was no logical reason for this process to end, just as there is no logical reason for the Darwinian biological evolution to end with a single species surviving unchanged forever after.

What of twentieth-century biology? It is now believed that a mutation may be favorable for the individual but unfavorable for the species. Furthermore, a mutation may be favorable for the species in the short-run, but unfavorable in the long-run. Herbert Spencer was fortunate to get his *Social Statics* into print before these later discoveries in biology. I find no evidence in social science, however, that the findings of twentieth-century biology have been either incorporated or explicitly rejected in modern social theory. It may well be a serious error that in discarding Social Darwinism, economists discarded the insights of biology as well.

XI

The very existence of different economic systems poses a problem for the economist who wishes to encompass all man's manifold economic activity in a unified theory based upon a universal principle or a set of universal principles. For such a theory must explain why human beings subject to the same biological and physical laws yet organize their economic activity in quite different systems.

To be more specific, consider the motivating factor traditionally assigned to a private-enterprise, capitalistic system—the economic self-interest of the individual interpreted as a desire to maximize his consumption of goods and services (presently or in the future). This factor runs like a continuous thread through non-Marxist economic

theory whether it be a microeconomic analysis of demand or macroeconomic consideration of the consumption function. We can agree that individual economic self-interest may be subject to modification by social pressures in capitalistic society without concluding that the assumption is a spurious one or does serious damage to the validity of theory based upon it.

When we turn to the Soviet system, however, individual economic self-interest becomes subordinate. As Professor Hoover said about that system thirty-five years ago: "The struggle for power has replaced the struggle for wealth."²⁵ This is not meant to imply that individual economic self-interest has disappeared entirely in the Soviet Union any more than that the lust for power is totally absent in the economic activity of capitalist society. What it does mean is that any attempt to explain man's socioeconomic arrangements as the result of his natural environment must explain why two systems, contemporaneous in time and aware of each other, exhibit such different prime motivations.

XII

In today's world, speculation about the origin and subsequent development of particular types of economic systems is more than a matter of intellectual interest. One of the most basic questions in the area of economic development concerns what type of economic system a poor nation should adopt in order best to achieve its goals. Here we note a curious inconsistency. The classic theoretical models of existing systems, like those of Marshall or Marx or Walras or Keynes, imply that the state of the system and the system itself is a *natural* outcome of its previous history. Yet the question asked concerning real world economic development is often what state of the existing system shall we bring about or, even more fundamental, what type of system shall we adopt.

If an economic system is always the result of inexorable, natural forces, then we can do no more than put those forces to work within the system just as engineers put to work the forces within the natural universe, without ever considering the possibility of altering those forces or of changing the natural universe within which those forces are generated. Economics appears in this light to be impaled on the horns of a true dilemma. If it is to be "scientific," it must assume that man's

²⁵ *The Economic Life of Soviet Russia* (New York, 1931), p. 332.

economic activity is organized in a system that is not constructed in any way out of the random passions, ambitions, and ignorance of particular men. A prerequisite for the cumulation of knowledge and understanding is permanence and consistency in the forces that shape phenomena. Yet man is never satisfied to adopt this attitude in his *actions* and *reactions* toward the social universe. Both Marx and Mill illustrate this dilemma in their own life and work.

It is a commonplace with social scientists to dismiss the problem of free will and determinism as being long unsolved, impossible of solution, or irrelevant. But problems do not become unimportant when they go unsolved. Consider one way which is sometimes offered to escape the question, namely, that individuals may act as though they exercise free will, but in sufficiently large numbers they will exhibit a kind of statistical determinism. There is considerable evidence that this is true *within a particular system*. We do not have sufficient numbers of systems, however, to be able to make the same statement about them, and the systems we do have for study exhibit differences and irregularities which we suspect spring from something more fundamental which may or may not be related to the natural universe.

Recently, F. H. Hahn and R. C. O. Matthews have suggested that the concept of the whole world as an underdeveloped economy deserves more thought and attention.²⁶ What such an approach would require before useful theoretical work could proceed is nothing less than specification of those forces in the sphere of human economic activity which are truly universal ones. The concept of the world as an economic system is not just another economic system to be analyzed, as is customary for specific limited systems of economic organization. Such an analysis would have to be on a new and different level of abstraction and could not escape the necessity of finding answers to at least some of the questions raised in this essay.

²⁶ "The Theory of Economic Growth: A Survey," *Economic Journal*, LXXIV (Dec., 1964), 891.

Henry M. Oliver, Jr.* *The Concept and the Classification of Economic Systems*

Debate over classification is one of the most conspicuous features of the literature on economic systems. The argument takes three forms: The classificatory structure to be employed, the proper slot for a particular economy in a particular classificatory structure, and the "proper" meaning of a category's title. This paper chiefly concerns the first of these forms. More specifically it (1) looks at the classificatory criteria, classificatory frameworks, and classifications employed by eight recent books on economic systems;¹ (2) asks which of many possible meanings of "economic system" the authors have assigned that term (i.e., which of many possible concepts of "economic system" the classifications reflect); (3) asks which of various possible purposes the classifications may be intended to serve.

Classificatory Criteria and Frameworks

Economies of the World Today makes a good starting point because of its simple classificatory structure. Wilcox, Weatherford, and Hunter make only one basic distinction in their little first-year textbook, that between "market" and "command" economies, and, in doing so, employ only one classificatory criterion, the general way in which economic decisions are made and economic activities co-ordinated. Although early in the book they distinguish between "economic individualism," characterized by private ownership and management

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¹ Clair Wilcox, Willis D. Weatherford, Jr., and Holland Hunter, *Economies of the World Today* (New York, 1962); Lynn Turgeon, *The Contrasting Economies: A Study of Modern Economic Systems* (Boston, 1963); Morris Bornstein, ed., *Comparative Economic Systems: Models and Cases* (Homewood, Ill., 1965); P. J. D. Wiles, *The Political Economy of Communism* (Cambridge, Mass., 1962); Carl Landauer, *Contemporary Economic Systems: A Comparative Analysis* (Philadelphia, 1964); Marshall I. Goldman, ed., *Comparative Economic Systems: A Reader* (New York, 1964); George N. Halm, *Economic Systems: A Comparative Analysis* (New York, 1960); and Arthur Schweitzer, *Big Business in the Third Reich* (Bloomington, Ind., 1964).

of productive enterprises, and “economic collectivism,” characterized by governmental ownership and management, they quickly state that this distinction is not the truly significant one, and therefore not the one around which they will organize their book. Also, although they stress that all economies are “mixed,” they state that demands and costs predominantly govern allocation in most of them and that central authority has the same dominant role in others.² Examples of market economies are the United States, Japan, the English-speaking countries of the British Commonwealth (including Great Britain itself), and most of the countries of western Europe (including the Scandinavian lands), the Middle East, southern Asia (including India), Africa, and Latin America. Examples of command economies are Russia and China and their satellites, Yugoslavia, Spain, Egypt, and Cuba (with some new African states “moving in the same direction”).³

Presumably one reason for the simple classificatory scheme is that *Economies of the World Today* is a quite brief, elementary textbook. Both brevity and pedagogy may have demanded emphasis on the one distinction and the one criterion. A methodological treatise had, however, earlier proposed a similar emphasis for economists engaged in more scholarly, deeply analytical study. In *The Foundations of Economics*⁴ Walter Eucken had argued that all observed economic systems, both past and (then) existing, represented varying combinations of two—and only two—“pure elemental forms,” “the centrally directed economy, in which there is no exchange,” and “the exchange economy.” Although “an immense, almost unlimited variety” of economic systems had risen and disappeared, Eucken said all had been mixtures of these—and only these—ideal types, which therefore must serve as the main headings in the classificatory framework that economic analysis requires. Indeed, he added, it is “hardly conceivable” that traces of another type of economic system should be found.⁵

² *Economies of the World Today*, pp. 5–9.

³ *Ibid.*, pp. 9–10, 53–54, 101, 125.

⁴ Chicago, 1951.

⁵ *The Foundations of Economics*, pp. 81–82, 89–90, 97–98, 109, 115–116, 118, 120, 129. Also see Walter Eucken, *Grundsätze der Wirtschaftspolitik* (Bern, 1952), pp. 19–24.

Eucken emphasized that the distinction between “centrally directed” and “exchange” economies is not the same as that between government-ownership and private-ownership ones. Although *Grundsätze der Wirtschaftspolitik* shows that he regarded the distinction between the post-1928 Soviet and the post-1936 systems as significant for some purposes, he continued to rely solely on method of allocation as his classificatory criterion when he formally divided his two main categories into less inclusive ones. He merely paid more attention to detail. (See *The Foundations of Economics*, pp. 119–172, and *Grundsätze der Wirtschaftspolitik*, pp. 19–24, 60–62, 104–106.)

An equally simple classificatory scheme would, of course, be one that paid attention only to the distinction that *Economies of the World Today* first mentioned, i.e., to the difference between private and public enterprise. Writings that start with this basic distinction, however, seem always to make at least one other as well.⁶ Even when they divide economies into only two categories, they seem to employ at least one additional criterion as well as system of ownership.

The Contrasting Economies: A Study of Modern Economic Systems provides a recent example. Using contemporary Russia and the United States as "prototypes," or reference points, for classifying a "vast array" of "mixed systems" that range from one of these "extremes" to the other, Lynn Turgeon makes use of two labels: "noncapitalist-oriented" and "capitalist-oriented," the former for economies that are "consciously progressing with the socialization of industry and/or the collectivization of agriculture," the latter for those that are not, and that are characterized by "private, unequal ownership" of the means of production. But, when explaining his classification, he states that the book will examine "the methods by which basic problems get solved." In other words, method of allocation is a classificatory criterion. Also, of course, even in the definitions of the labels, present ownership, or ownership plus management, is not the sole criterion. Policy makers' intentions enter into both definitions, and inequality into the second.⁷

Contemporary economies which Turgeon gives as illustrations are: non-capitalist-oriented—"seven roads to socialism" represented by (i) Russia, (ii) China, (iii) the eastern European countries other than Poland and Yugoslavia, (iv) Poland, (v) Yugoslavia, (vi) India, (vii) Cuba (with Egypt, Guinea, Ghana, British Guiana, Indonesia, and Ceylon as "potential entrants"); and capitalist-oriented—the United States, West Germany, Britain, Australia, France, the Scandinavian lands, and most of the underdeveloped countries not listed above.⁸ A list for an earlier period presumably would have included Hitler's Germany and Mussolini's Italy, and perhaps also Franco's Spain and Peron's Argentina, within the second (capitalist-oriented) category. "Fascist" economies, Turgeon remarks, "certainly bore a close resemblance to capitalist ones."⁹

⁶ E.g., Marx's definitions of "capitalism" and "socialism."

⁷ *The Contrasting Economies*, pp. 3-4, 11-13, 20.

⁸ *Ibid.*, pp. 14-23.

⁹ *Ibid.*, pp. 11-13.

Comparative Economic Systems: Models and Cases, edited by Morris Bornstein, offers a simpler classificatory structure, although dividing economies into a greater number of categories. Contrasting both "capitalist" (private-ownership) and "decentralized market" with "centrally planned" economies, Bornstein derives four "important combinations" from these contrasts: (i) "the capitalist decentralized market model," alias "capitalism," (ii) "market socialism," sometimes called "democratic" or "liberal" socialism, (iii) "the socialist central planning model," alias "authoritarian socialism," and (iv) "the detailed central planning within a formally capitalist framework that characterizes fascism."¹⁰

At least, this symmetrical framework is one that introductory notes to Parts I and II of the book of readings supply. The table of contents and general organization depart even less from the Eucken-Wilcox pattern, condensing (iii) and (iv) into a single great category, "central planning," although treating (i) and (ii) separately and thus suggesting that the ownership criterion is more significant for market economies than for centrally administered ones. Also, editorial notes divide (i), (ii), and (iv) into subcategories and further seem to say that other criteria, as well as system of ownership, are significant for classification purposes.

The subcategories that are distinguished are: in the case of (i) — "laissez-faire" capitalism, in which governmental intervention in the economy is "absent or negligible," and "regulated" or "mixed" capitalism, in which governmental intervention is "substantial"; in the case of (ii) — the Taylor-Lange and Lerner "blueprints for market socialism"; in the case of (iv) — the "comprehensive regulation" to which "fascism" subjects private property and enterprise, and the "large amount of planning" that often characterizes wartime "capitalism."¹¹ Additional criteria seem to be introduced, as Bornstein lists the "predominance of economic gain as the guiding force in production decisions" as a third "basic characteristic" of "a capitalist economic system" and describes "fascism" as regulating economic behavior "in the interests of the state as defined by the supreme leader at the head of the totalitarian government."¹²

¹⁰ *Comparative Economic Systems: Models and Cases*, pp. 1, 33, 34, 78, 116.

¹¹ *Ibid.*, pp. 34, 78, 116.

¹² *Ibid.*, pp. 34, 116.

Examples Bornstein mentions are: regulated capitalism—France and the United States; market socialism—Yugoslavia (“the only true example”); “central planning” with governmental ownership—Soviet Russia; “central planning” with private ownership—post-1936 Nazi Germany.¹³ But, of course, he too, like Eucken, Wilcox *et al.*, and Turgeon, stresses the “mixed” nature of all contemporary economies; and the same introductory note that lists the four “important combinations” points out that still others are possible, i.e., that models as well as actual economies may be mixtures of both government and private ownership, or of both centralized and decentralized allocation.¹⁴

In *The Political Economy of Communism* P. J. D. Wiles shows how the ownership and allocation criteria can be used to make a large number of distinctions even when none of the models are “mixed.” True, the two most basic distinctions are the same as in Bornstein’s book of readings: those between a “socialist” (government-ownership) and “capitalist” (private-ownership), and between a “market” and a “command” economy.¹⁵ Wiles’s stress, however, is on two finer sets of distinctions, i.e., on ten “ownership models” (out of the “infinitely many” said to be possible) and eight “allocation models” (also out of “innumerable possibilities”).

Ownership models in *The Political Economy of Communism* are (i) “primitive capitalism,” in which “the private individual” manages what he owns; (ii) “managerial capitalism,” in which “anonymous shareholders” are the owners; (iii) “managerial socialism,” in which the public board of a nationalized industry or firm operates on a free market independently of the state; (iv) “state socialism,” in which ministries or local authorities operate the economy; (v) “consumers’ co-operation”; (vi) “producers’ co-operation”; (vii) “syndicalism,” in which employees own the nationalized “establishments” where they work; (viii) “municipal socialism,” in which “the people organized in a local authority” own the enterprise; (ix) “community socialism,” in which the owners are “the people as both consumers and producers at once”; (x) “full communism,” with “the whole nation . . . turned into a single Commune.”¹⁶

In a sense Wiles lists many more models, without assigning them

¹³ *Ibid.*, pp. viii, 78, 116, 157–158, 213, 229, 250.

¹⁴ *Ibid.*, pp. 1, 33.

¹⁵ *The Political Economy of Communism*, pp. 3–12, 19, 67–72.

¹⁶ *Ibid.*, pp. 4–12.

separate names or numerals, since he stresses the distinction between *de jure* ownership and *de facto* control and points out divergences that seem often to occur. Also, he assigns a title, "state capitalism," to one such ownership system, i.e., that in which "capitalists" hold the titles but governmental authorities make the decisions.¹⁷

Allocation models that Wiles lists include seven "pure" ones (numbered 1-7) and one "mixed form" (numbered 8) thought to be especially pertinent in contemporary economies. Specifically, they are: (1) "Central Command," or "central allocation in physical terms without money"; (2) the same as (1), except that money serves as an accounting device, although having no significance for resource allocation; (3) "the so-called 'centralized market' economy," in which a central authority allocates resources "on free market *principles* but by central methods of administration"; (4) the inversion of model (3), with central planners using money inducements to persuade consumers and resource owners "to conform to the predetermined plan"; (5) a "capitalist war economy," in which central planners determine the pattern of final output, leaving producers free to choose the input mixes which they prefer and consumers free to bid for the outputs which the government does not utilize; (6) "full market," or "the pure competitive system with decentralized decision-making"; (7) "regulated market," or model (6) "improved by a number of indirect controls" which direct profit-seeking activity without weakening the profit motive; (8) a combination of (3) and (7), i.e., a "centralized market" economy in the investment sector and a "regulated market" economy in the consumption one.¹⁸

The combinations of ownership and allocation models that Wiles believes possible are not nearly as numerous as algebra might seem to suggest. First, he points out, both "state socialism" and "Full Communism" are incompatible with either a "full market" or a "regulated market" system of allocation. They imply some variety of central administration. Next, he argues, in the long run all the ownership models except those two require some variety of "market relationship." Decentralized ownership cannot long survive within a command economy, although "state capitalism" may exist for a while (as during wartime).¹⁹

¹⁷ *Ibid.*, pp. 4-11.

¹⁸ *Ibid.*, pp. 67-72.

¹⁹ *Ibid.*, pp. 7, 19-20, 67.

As its title suggests, *The Political Economy of Communism* chiefly pays attention to countries in which Communist parties rule, with emphasis on:

Ownership models: Soviet Russia—Full Communism (model x) during the early period labeled “War Communism”; a mixture of several models (i, iii, iv, vi) during the NEP period; chiefly state socialism (model vi) in agriculture.²⁰ Contemporary Yugoslavia—*de jure* syndicalism and *de facto* managerial socialism (models vii and iii) in the industrial sector; municipal socialism, producer co-operation, and primitive capitalism (models viii, vi, and i) elsewhere.²¹ Contemporary Poland—*de jure* state socialism (model iv), but perhaps much *de facto* managerial socialism (model iii) in the industrial sector; primitive capitalism (model i) in agriculture.²² Contemporary China—state socialism (model iv) and the People’s Communes (*de jure* model ix).²³

Allocation models: Soviet Russia—Central Command during the period of War Communism; a centralized market economy in the investment sector and a regulated market economy in the consumption sector (i.e., the mixture of models 3 and 7 mentioned separately and numbered “8”) during the NEP period; chiefly the inversion of the centralized market economy (model 4) since then, but with the consumption sector coming to contain large elements of a centralized market economy (model 3) and even, recently, of a full market economy (model 6).²⁴ Contemporary Yugoslavia—essentially a variety of “market Socialism,” with allocation models 7 and 8 (regulated market economy and the NEP mixture) both applying rather well.²⁵ Contemporary Poland—a system resembling both Russia’s and Yugoslavia’s, with models 3 and 4 (the centralized market economy and its inversion) characterizing the investment sector and models 6 and 7 (full market and regulated market) characterizing the current production.²⁶ Contemporary China—the command models that accompany state socialism and Full Communism.²⁷

²⁰ *Ibid.*, pp. 6, 9, 12, 16, 22, 29–36, 41, 43–44, 341, 345.

²¹ *Ibid.*, pp. 4–5, 10–11, 36–41, 46.

²² *Ibid.*, pp. 4–5, 41–43, 339.

²³ *Ibid.*, pp. 12, 16, 44, 342–347.

²⁴ *Ibid.*, pp. 29–36, 43–44, 67, 69, 72.

²⁵ *Ibid.*, pp. 19–20, 36–41, 71, 75.

²⁶ *Ibid.*, pp. 41–43, 71, 318.

²⁷ *Ibid.*, pp. 44, 133, 154, 173, 342–347, 365, 376.

Non-Communist examples Wiles mentions include:

Ownership models: (i) primitive capitalism—"a purely peasant economy"; (iii) managerial socialism—"the nationalized sectors of free countries"; (iv) state socialism—"many elements" in British postwar nationalization; (vi) producers' co-operation—Mexican *ejidos*, Israeli workers' villages; (xi) community socialism—Hutterite communities, Israeli *kibbutzes*.²⁸

Allocation models: (5) capitalist war economy—war economies in Western countries; (7) regulated market—most Western economies, but with these approaching full market economies (model 6) in lands of "dogmatic capitalists" (e.g., West Germany and Switzerland); (8) a centralized market economy in the investment sector and a regulated market economy in the investment sector—"nearly all underdeveloped countries today."²⁹

If its author had chosen to pursue a certain line of thought, the next book on the list would have elaborated on the general approach that Eucken, Wilcox *et al.*, and Wiles's allocation models represent. Command and exchange, points out Carl Landauer in *Contemporary Economic Systems: A Comparative Analysis*, are only two of the possible stimuli to economic action. Another two are solidarity and tradition, i.e., a feeling for the group and a tendency to act in customary, time-hallowed ways. Landauer did not, however, use these as the main headings in a classificatory framework. Command, exchange, solidarity, and tradition, he states, are merely the four "bricks," or "building blocks," of which all systems are constructed. An economic system is "the sum total of the devices" by which economic decisions are made and economic activities co-ordinated, and economists should distinguish between systems in the way that anthropologists distinguish between races, looking at different patterns and making the over-all distinctions that resemblances and differences in the patterns allow.³⁰

Most of Landauer's textbook compares "capitalism" with "communism" and "socialism," with the first of these initially and briefly identified as the economic system of the United States, Japan, and

²⁸ *Ibid.*, pp. 4-12.

²⁹ *Ibid.*, pp. 19, 70-72.

³⁰ *Contemporary Economic Systems*, pp. 2, 8-11.

western European nations; the second as that prevailing in Russia, eastern Europe, and China; and the third as that "which democratic socialists in Europe and some Asian countries wish to establish."³¹ For the last two of these three categories the initial, brief definitions seem not only to introduce but also to encompass the later, lengthier ones. Paragraphs on the nature of "capitalism" define that term quite conventionally: private property, freedom of contract, price system, money and credit, (some) large-scale enterprise, enforcement of contract. Merely, words such as "relatively" are emphasized.³² Landauer's discussion of "communism," however, shows that his definition is wide enough to include such different economies as Stalinist Russia and contemporary Yugoslavia—although his description of the South Slav country resembles Bornstein's and Wiles's, and he speaks of it as approximating "a socialist market economy."³³ Paragraphs on the nature of "socialism" chiefly argue that collective ownership is not now "applicable as a basic criterion," because most Western socialist parties do not regard it as such and because in most underdeveloped countries the term has a broader meaning, and remark that "socialism" is not a "clearly definable" system, but only a "tendency" to favor policies that differ in various ways from those favored by "capitalism's" and "communism's" advocates.³⁴ Topics discussed under the heading "socialism" include *inter alia* nationalized enterprises in Britain and France; co-operative movements in Belgium, Sweden, and Israel; and French "indicative" planning³⁵—but not Yugoslavia's close approach to "a socialist market economy" or collective ownership and planning in countries under Communist rule.

When discussing primitive economies in the last part of the book, Landauer also suggests a three-way classification, listing as the "archetypes" (a) ownership by individual or small family, (b) ownership by large family, clan, or tribe, and (c) "feudalism," or the division of rights between dependent peasant and overlord, as in medieval Europe—but without grouping any of these with modern ownership-and-allocation systems.³⁶

Comparative Economic Systems: A Reader, edited by Marshall I.

³¹ *Ibid.*, pp. 2, 5–6.

³² *Ibid.*, pp. 85–86.

³³ *Ibid.*, pp. x, 433, 437, 473–477.

³⁴ *Ibid.*, pp. 231–232.

³⁵ *Ibid.*, pp. 233–252, 271–289.

³⁶ *Ibid.*, pp. 491, 493. (Also see pp. 3, 6.)

Goldman, differs from Landauer's text in that it adds two categories "Syndicalism-Guild Socialism" and "Fascism" to "Capitalism," "Socialism," and "Communism." Also, it includes goals as well as institutional arrangements among its classificatory criteria.³⁷ But in its definition of "socialism" and in its examples of both "socialism" and "Communism," the book of readings is very like *Contemporary Economic Systems*. "Socialism," says Goldman, could be defined to include two of the other four headings as well, i.e., "Syndicalism-Guild Socialism" and "Fascism" ("National Socialism"), but he will use the term to include only "Socialism as found in democratic and developed countries . . . along with Socialism as practiced in developing countries." England under the Labour party, he states, is "the most suitable example" of the former, although the Scandinavian Socialist parties' programs are very like the British. Among the many brands of "Socialism" in the underdeveloped countries are those of Nasser in the Arab world, Nehru in India, and Nkrumah in Africa. Examples of "Communism" that Goldman offers are "The Soviet Model," "The Chinese Model," and "The Yugoslav Model"—although, much earlier in the book, he remarks that Yugoslavia "seems to be heading for Syndicalism."³⁸

The example of "Syndicalism-Guild Socialism" that he offers is G. D. H. Cole's dream economy (which presumably accounts for his statement about Syndicalism-Guild Socialism's seeking a return to preindustrial "serenity" and virtually ignoring "growth of consumption and industrial capacity").³⁹ Hitler's Germany and Mussolini's Italy are the only two examples of "Facism" that he lists, but, he remarks, some small countries are still "Fascist in spirit if not in form." When describing "Fascism," Goldman terms it "as much a matter of politics as . . . of economics," "essentially a system for gaining and maintaining control of a state by an individual or a group," and a system that puts top priority on growth in heavy, and especially in military, industry.⁴⁰ The United States is "Capitalism's" lone illustration in the volume.⁴¹

An introductory chapter to George N. Halm's *Economic Systems: A*

³⁷ *Comparative Economic Systems: A Reader*, pp. viii, 8, 12, 183-184.

³⁸ *Ibid.*, pp. 11, 89-91, 269-270, 313-314, 335-338.

³⁹ *Ibid.*, pp. 11-12. (Goldman here refers to the "almost dreamlike quality" of Cole's proposals.)

⁴⁰ *Ibid.*, pp. viii, 181.

⁴¹ *Ibid.*, pp. vii, 33-35.

Comparative Analysis also adds goals to institutional devices as classificatory criteria. "Obviously," Halm remarks, a classifier's initial tasks are to discover what "the different systems . . . seek to accomplish and which institutions are considered necessary for this purpose." The categories which he derives, however, are very like those in Bornstein's book of readings, which had only system of ownership and method of allocation as their criteria; i.e., "capitalism," "liberal (or democratic) socialism," and "central planning," with the last of these represented by both "authoritarian socialism" (alias "communism") and "authoritarian capitalism" (alias "fascism"). Also, the basic characteristics which he lists are predominantly institutional. The chief classificatory significance of "goals" seems to be the same as in *Comparative Economic Systems: Models and Cases*, i.e., to distinguish between "fascism" and "democratic capitalism during total war."⁴² Thus: "Capitalism," according to Halm, is a "market economy" characterized by "consumer's sovereignty," "free choice of occupation," "freedom of private enterprise" (and therefore "private ownership of the material means of production"), "freedom to save and invest," and "competition" (plus "monopolistic tendencies"). "Liberal socialism" differs from "capitalism" in that there is "public ownership of at least the strategically important material means of production," but, like the other system, is one where "free choice of consumption and of occupation" prevail. Under "authoritarian socialism" "the central authority disposes of" all resources, including labor, "autocratically" setting the economy's goals, directing production (via "a single all-inclusive plan"), and regulating distribution. "Authoritarian capitalism" consists of making wartime capitalism's "many far-reaching controls" "permanent for the achievement of collective peacetime purposes."⁴³

Of these four systems, says Halm, capitalism is essentially that of "the industrial economies of the West . . . not guided by a central plan," although in some of these (e.g., Britain under the postwar Labor Government) peacetime regulations have been so numerous as to "impair the working of the price mechanism";⁴⁴ liberal socialism is non-existent, although various countries (including Britain and Sweden) have adopted welfare-state policies and Yugoslavia "has been experimenting with what has been called 'market syndicalism'";⁴⁵

⁴² *Economic Systems*, pp. ix, 6, 35, 166-170.

⁴³ *Ibid.*, pp. 35-43, 166-170.

⁴⁴ *Ibid.*, pp. 35-36, 271-278.

⁴⁵ *Ibid.*, pp. 4-5, 251.

authoritarian socialism is Soviet Russia's system and also that which predominates in Polish industry;⁴⁶ authoritarian capitalism had Nazi Germany (after the early period) as its "most outstanding example."⁴⁷

The last book on the list, Arthur Schweitzer's *Big Business in the Third Reich*, differs considerably from the others in that it strongly reflects the influence of Max Weber's method of classification and argues for "deliberate linkage" of economics with sociology and political science. Chiefly concerned with a rather short period of German history, the Nazi regime during 1933–1936, the book does not offer an over-all classificatory framework comparable to those described above; but, when examining the early Nazi period and looking briefly at its prelude and aftermath, it employs a rather large number of type-of-system concepts (resembling Wiles's treatise on communism in this respect, and also in the extent to which the system concepts do not refer to total national economies). Distribution of power and power-holders' goals are among the classificatory criteria.⁴⁸

Most of the distinctions that Schweitzer makes are between different varieties of "capitalism." Groupings that he offers include:

(i) Weber's concepts of "industrial," "commercial," "financial," "potential," and "imperialist" capitalism, represented by "particular groups of businessmen, who promote different interests and ideologies"—with the next-to-last of these deriving profits from the goods and services they sell to government and the last seeking "exploitation gains" from rule abroad or foreign policy;⁴⁹

(ii) "personal" and "corporate" capitalism—referring to the organization of business enterprises;⁵⁰

(iii) "monopoly," "competitive," and "social" capitalism—that which chiefly characterized the Weimar period, that which Weimar actions were intended to "retain or re-establish," and that which Weimar social policy was meant eventually to create;⁵¹

(iv) "privately controlled" and "organized" capitalism—that system preceding the Nazi period and the compulsory organization

⁴⁶ *Ibid.*, pp. 237–252.

⁴⁷ *Ibid.*, pp. 255–266.

⁴⁸ *Big Business in the Third Reich*, pp. x–xi, 2–6, 33, 44–59, 287–296, 579–583.

⁴⁹ *Ibid.*, pp. 3–4, 53–56, 532.

⁵⁰ *Ibid.*, pp. 256–261.

⁵¹ *Ibid.*, pp. 288, 355–356.

plus business self-government said to characterize the private sector during 1933–1936;⁵²

(v) “politically implemented,” “politically oriented,” and “state directed” capitalism—with business ruling the state in the first of these, gaining profits from policies set by political groups with non-economic goals in the second, and under a dictatorship that imposes goals and imposes direct controls in the third (the system said to characterize the public sector during 1933–1936 and the economy rather generally later).⁵³

Schweitzer also employs the term “status-ordained capitalism” to describe the leadership system that the Nazis introduced within business firms, and states that “status-ordained capitalism,” “organized,” “state-directed,” and “imperialist” capitalism were the four types existing within 1933–1936 Germany—with all four falling within the broad category of an “authoritarian capitalism,” since “power” was “transformed” into “authority.”⁵⁴

Other type-of-system concepts that *Big Business in the Third Reich* mentions include:

(a) “full fascism,” or “the Nazi monopoly . . . virtually complete”—the system said to prevail in “politics, information, education, and law-enforcement” by the end of 1936, and in the whole society later;⁵⁵

(b) “partial fascism”—or the division of power between the Nazis, the military, and big business said to prevail during 1933–1936 (with “organized,” “politically oriented” capitalism in the private sector as one of its main characteristics);⁵⁶

(c) “middle-class socialism”—comprising three “distinct features”: “peasant socialism,” “artisan socialism,” and “a peculiar brand of ruralism” forming the link between the other two;⁵⁷

(d) “guild-oriented . . . corporatism”—a leading characteristic of “artisan socialism”;⁵⁸

(e) “statism”—a system of controls, “exploitation,” and “eco-

⁵² *Ibid.*, pp. 5–6, 288, 457, 500–503, 528–532.

⁵³ *Ibid.*, pp. 411–413, 457.

⁵⁴ *Ibid.*, pp. 532–533.

⁵⁵ *Ibid.*, pp. 33, 555.

⁵⁶ *Ibid.*, pp. 33, 42–43, 536–537.

⁵⁷ *Ibid.*, pp. 113–117.

⁵⁸ *Ibid.*, pp. 79, 115–117.

conomic-political domination," which the Nazis imposed upon labor, but not upon business, during 1933-1936, limiting its scope then to industrial relations, capital markets, foreign exchange, foreign trade, and the public sector.⁵⁹

Obviously, some of the concepts overlap. As is stated above, *Big Business in the Third Reich* does not offer a classificatory framework, and different emphases in different parts of the book result in the use of different classificatory distinctions and sets of terms. The reason for including it with the other books, which do offer classificatory frameworks, is its quite different approach.

Different Classifications, Associations, and Definitions

A review of the classifications listed above shows striking differences in labels given some national economies. Thus:

Yugoslavia: Wilcox *et al.*—essentially a "command" economy in spite of much private enterprise; Turgeon—"noncapitalist oriented," one of the "seven roads to socialism"; Bornstein—"the only true example of market socialism"; Wiles—a mixture of various ownership and allocation models, but essentially a variety of "market socialism"; Goldman—one model of "Communism," although approximating a "socialist market economy"; Halm—a combination of "central planning" and "market syndicalism";⁶⁰

Great Britain: Wilcox *et al.*—essentially a "market" economy in spite of much nationalization and welfare-state policies; Turgeon—"capitalist oriented" in spite of . . . ; Goldman—"the most suitable example" of "socialism"; Halm—essentially an example of "capitalism," although interventions have impaired the working of the price system;⁶¹

Sweden: Wilcox *et al.*—"market" although . . . ; Turgeon—

⁵⁹ *Ibid.*, pp. 406-409, 450-451.

⁶⁰ *Economies of the World Today*, p. 10; *The Contrasting Economies*, pp. 17-19; *Comparative Economic Systems: Models and Cases*, p. 228; *The Political Economy of Communism*, pp. 4-5, 10-11, 19-20, 36-41, 71, 75; *Comparative Economic Systems: A Reader*, pp. viii, 269-270; *Contemporary Economic Systems*, pp. 433, 437; *Economic Systems*, pp. 251-252.

⁶¹ *Economies of the World Today*, pp. 9, 53-54; *The Contrasting Economies*, pp. 12-13; *Comparative Economic Systems: A Reader*, p. 89; *Economic Systems*, pp. 35-36, 271-278.

“capitalist-oriented,” although . . . ; Goldman—“socialism”; Halm—“capitalism” in spite of . . . ;⁶²

India: Wilcox *et al.*—“market,” in spite of . . . ; Turgeon—“noncapitalist-oriented,” one of the “seven roads to socialism,” although private enterprise is encouraged; Goldman—an example of “socialism”;⁶³

Nazi Germany: Turgeon—a “close resemblance” to a capitalist economy; Bornstein (following Eucken)—“centrally planned” although chiefly private-enterprise, after 1936; Goldman—“fascism”; Halm—“authoritarian capitalism,” alias “fascism,” or one form of a “centrally planned economy,” but with the move away from the earlier system proceeding gradually; Schweitzer—during 1933–1936 “partial fascism” (a mixture of four “authoritarian capitalisms” in most of the economy plus “full fascism” in the other parts), after 1936 “full fascism” (a “Nazi monopoly” plus “state-directed capitalism”).⁶⁴

Most of these different labelings, however, do not seem to represent *conflicting* classifications. True, Bornstein’s description of Yugoslavia appears to clash with that in Wilcox *et al.*, since “market socialism” is for Bornstein a subcategory of “market economy.” Presumably the two labels reflect somewhat different views of the relative importance of “command” and “market” elements within the South Slav economy. But different classificatory criteria seem to be sufficient explanations—although in the various authors’ minds they may not be *necessary* explanations—of the other differing classifications in the lists. Merely, because of the different criteria the classificatory frameworks which the books offer result in different associations for particular national economies.

Thus, Turgeon, Goldman, and Landauer group Yugoslavia with the other Communist-ruled economies, whereas Bornstein does not, because the first of these four authors asks whether a country is “consciously progressing with the socialization of industry and/or the collectivization of agriculture” and the next two seem chiefly to pay

⁶² *Economies of the World Today*, pp. 9–10; *The Contrasting Economies*, p. 13; *Comparative Economic Systems: A Reader*, pp. 89–90; *Economic Systems*, pp. 35–36.

⁶³ *Economies of the World Today*, pp. 9–10; *The Contrasting Economies*, pp. 15, 19; *Comparative Economic Systems: A Reader*, p. 90.

⁶⁴ *The Contrasting Economies*, pp. 11–12; *Comparative Economic Systems: Models and Cases*, pp. 116, 157, 158; *Comparative Economic Systems: A Reader*, p. 183; *Economic Systems*, pp. 255–266; *Big Business in the Third Reich*, pp. 33, 42–43, 411–413, 532–537, 555. (Also see Walter Eucken, *Grundsätze der Wirtschaftspolitik*, p. 62.)

attention to collective ownership and Communist rule, while Bornstein emphasizes method of allocation.⁶⁵ Wilcox *et al.* and Goldman group Britain and Sweden and India together, although for rather different reasons, with the former more impressed by the role of the market and the latter more impressed by the scope of government enterprise and welfare-state measures; Turgeon places the South Asian and the two European countries in opposing categories, because he believes that the British and Swedish departures from the traditional pattern are static but that India's will become progressively greater.⁶⁶ When attention is paid to dates and definitions, the labels assigned Nazi Germany also do not seem to clash (although interpretations of German history probably do). The chief reason that Turgeon gives for saying that "fascist" economies are very like "capitalistic" ones ("private, unequal ownership of the means of production") is irrelevant for Bornstein's, Goldman's, and Halm's distinctions between the Nazi type of economy and the more traditional Western one. Schweitzer's definition of "fascism" is not quite the same as that employed by any of the other four writers classifying the Nazi economy.⁶⁷ Also, his implied definition of "planning" seems to be narrower than Halm's and Bornstein's.⁶⁸

What the differing classifications seem *chiefly* to reflect—or, more accurately, what the differing classificatory criteria and frameworks plus the differing classifications seem to reflect—are, not different views about the "reality" of national economies, but, instead, different concepts of "economic system" and different purposes that classifications are intended to serve.

Concepts of "Economic System"

"Economic system" is a rather vague term. As stated above, part of the debate over classification concerns the criteria to be employed and the distinctions to be drawn from the use of these criteria. Another part, however, seems to concern the more fundamental question of what is to be classified. Precisely what are the classifiers talking about?

⁶⁵ References as in n. 60.

⁶⁶ References as in nn. 61–63.

⁶⁷ References as in n. 64.

⁶⁸ *Big Business in the Third Reich*, pp. 578–579; *Economic Systems*, pp. 253, 256, 258, 265–266; *Comparative Economic Systems: Models and Cases*, p. 116.

A review of the literature (not restricted to the above eight books) suggests quite a few possibilities, including: (1) the general, or over-all, institutional pattern of past and present "total economies"—with boundaries somehow drawn around them, and "economy" a much narrower concept than "society"; (2) the same as (1) except that "economy" and "society" are more nearly merged; (3-4) the general, or over-all, institutional patterns that political movements are supposedly intended to establish, with (3) distinguished from (4) in the way that (1) is distinguished from (2); (5-6) the same as (3-4) except that, although writers have proposed the patterns, political movements have not endorsed them; (7-8) the same as (5-6) except that they refer to institutional patterns that writers have described, with or without endorsing them; (9-10) possible combinations of various institutional features, with (9) distinguished from (10) in the same way that (1) is distinguished from (2).

More inclusive patterns (11-20), paralleling (1-10), i.e., "systems" defined as consisting not just of institutional devices, but of devices plus policy goals and policy details; and (21-30) still more inclusive patterns, paralleling (1-10), that have distribution of power as an ingredient, may be identified. Also possible are various combinations of, or compromises between, two or more of (1-30); and institutional patterns of segments of past or present economies; "drives," or patterns of them, fairly generally characterizing "economic action" within past or present societies, or within segments of them; various combinations of these last (unnumbered) two with (1-2), (11-12), and (21-22), i.e., with past and present actual patterns of institutions or institutions plus goals and policies, or plus goals and policies and distribution of power.⁶⁹

The eight listed books, of course, do not reflect nearly as varied a set of concepts of "economic system" as the patterns described above. But they do reflect considerable variation. Thus:

Wilcox, Weatherford, and Hunter, *Economies of the World Today*, reflects concept (1); i.e., it classifies the institutional patterns of actual economies and its lone criterion requires that "economy" be defined in a conventional (Western "mainstream") way. Similarly, the "cases" part of Bornstein, *Comparative Economic Systems: Models and Cases*, classifies only current and recent, conventionally defined economies,

⁶⁹ The next several paragraphs refer to system concepts by the numbers assigned above; e.g., (1-2), (11-12), (21-22).

and the book does not lump models and cases together, but provides a case for each of its models. Bornstein essentially departs from concept (1) only when editorial comments refer to the role played by the desire for gain in "capitalistic" economies and offer a partly political definition of "fascism" (a subcategory).⁷⁰

The concept of "economic system" in the other six books, however, is more inclusive. Or, at least, that which is classified is. This is least obvious in *The Contrasting Economies*, since Turgeon, like Wilcox *et al.* and Bornstein, talks only about actual economies. When grouping them as "capitalist-oriented" and "noncapitalist-oriented," however, he pays attention not only to their present institutional patterns but also their apparent future ones, and thus what is classified is some cross of the (1) and (3) listed above. Similarly, Landauer, in *Contemporary Economic Systems*, although reflecting concept (1) in his comments on "capitalistic" economies, introduces (3) when citing socialist parties' hopes as examples of "socialism." Indeed, he seems in effect to say that, when socialist parties' programs change, the nature of a "socialist" economic system changes along with them. Also, Landauer may introduce (4), (23), and (24) as well, since he seems to imply that those hopes concern the political as well as the more narrowly economic nature of society, and the uses of institutional devices as well as the devices themselves.⁷¹ Finally, his classification of Yugoslavia as "communist" seems to reflect concept (2) because the criteria that result in its being grouped with Russia, instead of with potential "socialist" countries, appear to be political and ideological.

Much of what has been said about Landauer's text also applies to Goldman's *Comparative Economic Systems: A Reader*, which seems to group the two Slav countries together for the same reason and which includes political and policy-goals criteria (and thus reflects concepts 2 and 22) in its definitions of "socialism" and "fascism." Moreover, when offering Cole's dream as the example of "syndicalism-guild socialism," Goldman's reader reflects concept (6)—unless the group around Cole can be called a "political movement." Halm's *Economic Systems*, although reflecting concept (1) to a greater extent, likewise defines "fascism" ("authoritarian capitalism") in political and policy-goals terms, and, when discussing "socialism," resembles Landauer's text in

⁷⁰ *Comparative Economic Systems: Models and Cases*, pp. 34, 116.

⁷¹ *Contemporary Economic Systems*, pp. 231–232.

saying that blueprints and socialist parties' hopes are the only examples.

Wiles's *The Political Economy of Communism* resembles Bornstein's book of readings in that it first offers models and then talks about cases, but most of the examples of ownership and the allocation models that it gives are segments or "elements" rather than total economies themselves. Schweitzer, *Big Business in the Third Reich*, even less often has total national economies in mind when employing the "capitalism" and other system concepts. "Partial fascism" applies to the 1933–1936 economy as a whole, "full fascism" and, apparently, "state-directed capitalism" to the subsequent period, but most of the terms—and, part of the time, also "full fascism" and "state-directed capitalism"—refer only to segments. Moreover, in still other ways Schweitzer's concept of "economic system" differs greatly from (1). Although, except in the cases of "middle-class socialism," "corporatism," and, sometimes, "social capitalism,"⁷² the system concepts refer to historical phenomena instead of ambitions or blueprints, those phenomena are not merely institutional patterns and are not restricted to the narrowly "economic." Attention is paid to the distribution of power, power-holders' conscious goals, and less conscious drives to economic action.

Purposes that the Classifications are Intended to Serve

As the preceding section stated, one of the questions that the differing classificatory frameworks raise is what they are intended to classify, i.e., the classifiers' concepts of "economic system." Another—a question which the differing concepts of "economic system" also raise—is the purposes that the classifications are intended to serve. Reflection about the ones they *may* be intended to serve suggests quite a variety of possibilities.

One possible general purpose is to make distinctions that may be significant for particular cause-and-effect questions. A classifier may in effect say to himself, "Of two characteristics (or patterns of characteristics) *A* and *B*, one may result in *R* and the other not. A distinction

⁷² *Big Business in the Third Reich*, p. 256.

between *A* and *B* may be useful for theorizing concerning *R*'s causes." Or, he may instead think, "A distinction between *A* and *B* may be useful for theorizing about *T*'s results. Of the two characteristics (or patterns of characteristics), one may result from *T* and the other not."

Likewise, the classificatory concepts that authors employ may reflect the answers they have already given to cause-and-effect questions, i.e., answers in which system categories serve either as independent or dependent variables, as above, or as both acting and acted-on variables in a chain of causation. (In other words, although a tentative choice of a classificatory framework necessarily preceded the theorizing, the decision to adopt a particular framework in the book came after the author looked at the theorizing and concluded therefrom that some—perhaps all—of the distinctions were significant for the analysis.)

But, of course, this is not to say that classifications in cause-and-effect analysis always reflect beliefs that the distinctions are, or may be, significant for particular cause-and-effect questions that the classifiers have in mind. One purpose of the analysis may be to show that the distinctions are not significant (for it). An author may borrow a classificatory framework—perhaps from another author, perhaps from common usage—in order to show that *A* and *B* have the same effects on certain dependent variables.

Also, classification may have non-analytical purposes, or, at least, purposes not related to cause-and-effect reasoning. As stated above, one way of classifying economies is to accept a framework that common usage offers. Possibly, the purpose is merely to organize descriptive information. An author may in effect say to his readers, "You have talked about and/or heard talk about various types of economic systems. Here are some examples of those types (as they have been explicitly or implicitly defined)." Or, a student of economic systems may, like (some) students of zoology or botany, or of physical or social anthropology, decide that certain differences in patterns are interesting and noteworthy in their own right. Classifications of economic systems may chiefly reflect a classifier's delight in the systematic framework he can provide for the variety he sees.

Finally, still another possibility is that the purposes of the classifications are rather general, undirected thoughts about cause-and-effect analysis, i.e., thoughts that lie between the non-analytical interests just mentioned and hoped-for answers to particular cause-and-effect ques-

tions. A classifier may in effect muse, "The difference between this and that looks big enough to be significant for some (possible) cause-and-effect questions. I cannot now say what those questions are, but if I note and label the distinctions, some day I or someone else may raise those questions and, when answering them, utilize the classificatory information." Moreover, part of the thought process that goes on at the back of the classifier's mind may be: "These are pretty complex patterns, and the differences I have noted are also pretty complex. If I affix labels to these patterns, perhaps an effect will be that I or someone else will keep them more thoroughly in mind and thus, in a sense, better 'understand' them. Also, thoughts will be shorter and more manipulable. For both these reasons, affixing labels to the noticed differences may help to generate new, fruitful theories and/or warn against misapplication of old ones."

Subcategories of the first general purpose mentioned provide still more variety. All the above is *very* general. Subject matter—other than the subject of "economic systems" (somehow defined)—is not mentioned at all. Types of cause-and-effect questions that classifiers have asked, however, range from those of welfare economics (allocation, growth, and income distribution), to those of political theory (freedom, distribution of political power, policies that will be adopted, and intranational and international conflict), and of more general social theory (e.g., about such matters as causes and effects of ambitions, ideologies, and attitudes and the historical development of social institutions).

Obviously, to say that all these many purposes are possible, and to say which of them underlie particular sets of classifications, is to make quite different statements. Reflection can suffice for the former. The latter requires evidence of a more demanding kind. Certain inferences about the above eight books, however, seem at least plausible.

First, questions of welfare economies seem to explain the distinctions between types of systems in Bornstein's book of readings, *Comparative Economic Systems: Models and Cases*. Its initial selection is Bela A. Balassa's "Success Criteria for Economic Systems."⁷³ The criteria that Balassa discusses are "static efficiency," "dynamic efficiency," "growth rate," "consumer satisfaction," and "distribution of income";⁷⁴ and

⁷³ Reprinted from Bela A. Balassa, *The Hungarian Experience in Economic Planning* (New Haven, 1959), pp. 5–24.

⁷⁴ *Comparative Economic Systems: Models and Cases*, pp. 2–3.

most of the selections that follow concern the significance of method of allocation and system of ownership for the first four of these. Moreover, the papers and chapters that Bornstein reprints stay almost entirely within the boundaries set by conventional "mainstream" definitions of "economics." Excursions into the realms of political and more general social theory are both minor and rare. Political possibilities and theories of the development of institutions are not among the book's subjects.

Much the same can be said of *The Political Economy of Communism*. True, welfare economics does not seem to quite the same extent to explain Wiles's classifications. On the first page he speaks of an economic model's political effects and expresses his belief that "state socialism" is "incompatible with political freedom." Also, when discussing the economic performance that various models give, he comments on the significance of Stalinist political controls; and in passages here and there he theorizes about the tendency of "managerial capitalism" to succeed the "primitive" variety and the likelihood that "managerial socialism" will follow it. These political-theory and theory-of-systems elements in the book are, however, quite minor ones.⁷⁵ Allocation and growth are, between them, the central topics in nearly every chapter in the book, and the only significance that Wiles assigns to most of the distinctions which he makes is their relevance for these subjects.

Five of the other six books are primarily addressed to undergraduates and therefore, understandably, seem to treat classification more as a directly informative than as an analytically significant device. *Economies of the World Today*, by Wilcox *et al.*, initially distinguishes between "market" and "command" economies because, the authors say, the two methods of allocation lead to different results;⁷⁶ but, of course, their first-year audience, plus the little time allotted for the "systems" part of the course, discourages theorizing to follow up this lead. When, in *The Contrasting Economies*, Turgeon groups all systems under two headings, "capitalist-" and "noncapitalist-oriented," apparently this is a way of merging a guess about the future with a description of the present, but the classification does not seem to enter into the analysis leading to the guess. Halm, in *Economic Systems*, explicitly argues that models must "correspond roughly to existing

⁷⁵ *The Political Economy of Communism*, pp. 1, 15, 79.

⁷⁶ *Economies of the World Today*, p. 7.

classifications (capitalism, socialism, communism, fascism).”⁷⁷ Goldman, in *Comparative Economic Systems: A Reader*, while not presenting this argument, seems to accept it, i.e., to believe that common usage should provide the classificatory framework. Similarly, Landauer’s decisions, in *Contemporary Economic Systems* to link all Communist-ruled economies as “communist,” and to make socialist parties’ proposals the substance of “socialism,” seems to reflect a desire to inform, more than one to analyze.

But, in so far as they use their distinctions in cause-and-effect reasoning, these books chiefly do so when asking fairly conventional, “mainstream” economic questions. The chief contrast to Bornstein and Wiles is that provided, not by the undergraduate texts and reader, but by Schweitzer’s study of 1933–1936 Germany, *Big Business in the Third Reich*. True, in much of this volume also, classification seems to play a chiefly informative, rather than an analytical role. Some of the labels seem to be intended to achieve descriptive emphasis, i.e., to be ways of saying, “The situation was *this*, not *that*.” But in an appendix which (*inter alia*) praises Weber’s methodology and attacks Eucken’s (which Bornstein and Wiles essentially accepted), the author indicates that the principal task which he assigned himself was “to understand the evolution” of an economic system, in this case “organized capitalism.”⁷⁸ And, in tracing and explaining the evolution of this system, he chiefly pays attention to questions that mainstream economics ignores, e.g., the effects of the distribution of power on economic policy, and of economic policy on the distribution of power. The systems concepts that he employs chiefly represent distinctions believed significant for such questions.

In brief, some of the debate over classification of systems continues, in a somewhat altered form, the old debate over the “proper” scope of “economics.”

⁷⁷ *Economic Systems*, p. 6.

⁷⁸ *Big Business in the Third Reich*, p. 583.

B. U. Ratchford* *The Government and the Central Bank in a Free Society*

The relationship which should prevail between the central bank and the government, and the central bank's position in the governmental hierarchy, are problems which frequently recur and are ever-changing in scope and significance in the major countries of the world. With the increased emphasis on monetary policy in recent years these problems have become more important, while larger and more complex bureaucratic structures have increased the difficulties of finding solutions. It is the purpose of this paper to examine some of the basic considerations involved in these problems, although it is not realistic to hope for definitive answers.

In a totalitarian or highly planned economy the place and role of the central bank present no problem. Monetary policy as such has little influence and is determined along with, and as part of, a general economic plan. The central bank becomes a subordinate part of an elaborate governmental machinery designed to administer the general plan rather than a separate policy-making agency. In practice, it functions primarily as an administrative or auditing department. Thus, in the Soviet Union and its satellites:

The state plans and determines production, the distribution of the produced goods, and prices. In the same way the state regulates investments. . . . Even short-term credits may be granted only for the purposes and in such amounts as scheduled in state planning. . . . The credit institutions not only operate as distributing agencies for planned credits, but . . . they are responsible for currently controlling the utilization of the credits according to schedule. Thus the banking system in central planned economies in general has a purely technical function within the framework of state planning.¹

At the other extreme, in a pure laissez-faire economy there would be few problems, although it is difficult to think of such an economy

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¹ Benjamin Haggott Beckhart, ed., *Banking Systems* (New York, 1954), p. 368.

existing in the same environment as a modern central bank. In such an idyllic situation the state would not intervene; it would not, through monetary policy, attempt to mitigate the business cycle, encourage employment, influence the international balance of payments, or otherwise affect economic activity. It would, of course, have to provide a monetary system, but presumably this would be done through basic legislation which would automatically tie the money supply to gold, the population, gross national product, or some other magnitude. In any event, there would be little room for discretion or policy-making.

It is in the mixed, basically free, economies which characterize most of the Western World that the most difficult problems arise as to the place and functions of the central bank and its relationship to the government of the day. In the larger countries, with their large, complex, and sensitive financial systems, a considerable amount of expert administration is required to provide even a workable payments mechanism. But nearly all countries go beyond that modest purpose. Their general economic policies call for action to avoid large economic fluctuations, promote economic growth and price stability, encourage high employment, and afford some protection to their currencies in international markets. Since World War II monetary policy has been employed extensively as a major vehicle to achieve those aims, and central banks administer monetary policy. The difficult questions which arise are: How much dependence or reliance should be placed on monetary policy? Should the institution charged with the monetary-policy function be a separate entity or legal person? What should be its place in the governmental hierarchy? How much autonomy, freedom, "independence," or discretion should it have?

I

The money power is without question one of the most important powers of any sovereign government. It is on a par with the defense power, the fiscal power, the power to conduct foreign relations, and others. These other major powers are almost invariably administered by a department which has a cabinet officer as head. The cabinet officer, of course, is chosen by the head of the government and is subject to dismissal at his pleasure. Yet—a curious and interesting fact—extensive research has not turned up a single case in which the operating head of the central bank occupies a cabinet post. There may

be isolated cases among the numerous central banks which have been organized in recent years, but there is none among the larger countries of the world. In fact, it is often provided that the head of the central bank and members of the governing or supervisory boards may not be members of parliament or hold other political posts. This is true without exception among the larger European countries, although in several cases the minister of finance or his equivalent appoints members of the governing board. In Australia, Ceylon, and several Latin American countries, however, the minister serves either as chairman or as a member of the governing board. In New Zealand the Minister, and in Canada the Deputy Minister, are members of the board but without vote.²

On the other hand, as a rule, and universally among the major nations, the central bank is not regarded as a minor agency to be tucked away as an obscure bureau in another department. In almost every case it is a separate corporate personality—a legal entity—with one or even several governing, supervisory, or advisory boards on which the government is represented in various ways. Thus, the Bank of Belgium has been described as “not a semi-public institution subordinated, for administrative purposes, to a minister. It is *sui generis*, an autonomous and private institution, but its activities are supervised by the government.”³ The chief executive officer of the bank is usually a man of considerable prestige and influence in governmental circles and not infrequently a member of important executive or advisory councils just below the cabinet level. In some cases the chief officer of the governing board of the bank may hold a position practically the equivalent of a cabinet post. In Holland the Minister of Finance may, under certain conditions, issue a directive to the Governing Board of the Netherlands Bank, ording it to pursue a specified policy. If the Board does not agree, it may appeal to the Crown. If the Crown upholds the Minister, the Bank must comply with the directive, but in that case the directive must be published in the official register, together with the reasons for it. As a semi-official summary of the Bank’s powers states, the Board’s right to appeal to the Crown “shows that in matters of monetary policy the Board is not subordinate to the Minister but his equal.”⁴

Why is the administration of the money power so different from the

² M. H. de Kock, *Central Banking* (3rd. ed.; London, 1961), p. 324.

³ Bank for International Settlements, *Eight European Central Banks* (London, 1963), p. 14 (cited hereafter as *E.E.C.B.*).

⁴ *Ibid.*, p. 263.

administration of the other major sovereign powers? We will return to this question, which goes to the heart of the problem of the relationship between central bank and government, after a look at some typical relationships between banks and governments and some of the factors which should govern a proper relationship.

In considering existing relationships between central banks and governments, however, some words of caution are in order. Such relationships are broad, elusive, intricate, complex, and ever-changing. In the first instance they are set out in the formal provisions of laws which may be broad, general, ambiguous, and/or incomplete. When the bank begins operations, it may not be feasible or possible to implement the law as the lawmakers had intended, so the administrators may be forced to improvise and interpret the provisions of the law. As time passes, some provisions become obsolete but may not be taken out of the law. New situations not specifically covered by the law develop and administrative or judicial interpretations may extend the law to cover them.

It has been said that central banking is an art rather than a science. Whatever the case, it is clear that personalities have much to do with the development of the powers and practices of central banks. A law which is unworkable with one set of personalities may work well with another. Laws may be changed without any change in practices and vice versa. When the Bank of England was nationalized in 1946, the Treasury was given power, under certain conditions, to issue directives to the Bank. The Radcliffe Committee concluded that "it would be very difficult to say whether the conferment of this direct authority brought about any actual change in the accepted relationship between Bank and Treasury. We do not think it necessary to form a view."⁵ The same, apparently, was true in France when the Bank of France was nationalized in 1945.⁶ On the other side, relations between the Federal Reserve System and the Treasury became very strained in 1950 and early 1951. But without any change in the law an accord was worked out, and, after some changes in personnel, relations improved greatly and have been satisfactory since that time. A somewhat similar development took place in Canada. For some time the Minister of Finance disclaimed any responsibility for the actions of the Bank of Canada and the Governor of the Bank did not act in close concert with

⁵ *Report of the Committee on the Working of the Monetary System*, Cmnd. 827 (London, 1959), p. 271.

⁶ *E.E.C.B.*, p. 125.

the Minister. In response to widespread and growing controversy, the Governor resigned. The new Governor issued a statement on his accession, acknowledging the ultimate power of the Minister of Finance to issue directives to the Bank when the two could not agree. Without any change in the law the relationships changed greatly, and the arrangement has worked smoothly since then.

In brief, laws, regulations, and even formal descriptions of a central bank's structure, organization, and operations may not give an accurate picture of the real situation. Perhaps a student would have to spend several months on the scene studying a bank's operations and personnel to get an adequate understanding of the true relationship between the bank and its government. With that caveat, we turn to a consideration of some aspects of central bank-government relationships.

II

In a majority of cases, and increasingly so with the central banks established in recent years, the state owns all the capital stock of its central bank. The ownership is complete in Canada, England, France, Germany, Holland, and Sweden. At the other extreme, Italy, Switzerland, and the United States hold none of the central bank stock, while Belgium owns half. Usually there are strict limitations on the ownership of the stock not held by the state. In Italy only "institutions incorporated under public law" may own the stock, and in practice savings banks, other credit institutions, and insurance companies own a large majority of the stock of the Bank of Italy. Only Swiss nationals and companies may own stock in the National Bank of Switzerland, and in the United States member banks hold all the stock of the Federal Reserve Banks.

Stock ownership, however, is not used to any significant extent as a vehicle of control, and there appears to be little, if any, relationship between state ownership of stock and the degree and kind of state control. As one writer has expressed it: "In the shifting relationships between the central banks and the State, the transfer of central bank ownership is more a symbol than a change of substance."⁷ The state-owned stock of the Bank of England carries no voting right, and in the

⁷ Miroslav A. Kriz, "Central Banks and the State Today," *American Economic Review*, XXXVIII (Sept., 1948), 580.

Netherlands the state as a stockholder "has but little power."⁸ Conversely, stock owned by parties other than the state carries very limited rights and prerogatives; both its voting power and its right to share in earnings are severely restricted.

The state's control over its central bank is exercised in nearly all cases by the government's power to name one or more of the bank's executive officers and some or all members of the board, council, or other agency which governs the bank's policies and operations. With the Bank of England, the Crown appoints, on nomination by the Chancellor of the Exchequer, the Governor and Deputy Governor for terms of five years and sixteen directors for terms of four years, all of whom make up the Court of Directors. (Informally, the bank management plays a significant role in choosing the members of the Court through its advice to the Chancellor.)

There is no limitation on choice except that a member of the Court may not be an alien, a Minister of the Crown, or a Member of the House of Commons, nor be in paid employment in a government department. No formal or representative qualifications are laid down and the objective is a Court composed of men of affairs of wide experience, including some members who are expert in central banking. It has become customary that no Director shall be on the board of one of the large banks and that at least one Director shall be close to the trade unions. There is no maximum age but it is customary not to serve after the age of seventy. It would not be considered wise for members of the Court specifically to represent sectional interests. The direction of the Bank is at all times governed by its corporate view of the best interests of the community. . . . Individually they [the directors] are under no political or governmental control and the Court as a body is subject only to directions from the Treasury. . . .⁹

In Germany the Central Bank Council governs the Bundesbank. The Council is made up of the President and Vice President of the Bank, seven other members of the Directorate, and the nine presidents of the Landeszentralbanken. The members of the Directorate (including the President and Vice President) are appointed by the President of the Federal Republic after consultation with the Council. All appointments are normally for eight years and all appointees must have special professional qualifications. The presidents of the Landeszentralbanken are appointed by the President of the Federal Republic on nomination by the Bundesrat; the nominations, in turn, are based on

⁸ *E.E.C.B.*, p. 233.

⁹ *Ibid.*, pp. 99, 100.

recommendations from the *Länder* authorities. All nominations must be made only after consultation with the Central Bank Council. Because of the nature of their positions these presidents are also professionally qualified, so it would seem that the Bundesbank is governed by a council of professional bankers.

The Bundesbank is required by law to support the general economic policy of the Federal Government in so far as this is consistent with its duty to safeguard the currency. But the Bank “does not come under government supervision”; its organs of management “are on a par with the highest Federal authorities and are not subject to instructions from the Federal Government or, of course, to instructions from any other authority.”¹⁰

The Bank of Canada is governed by a Board of Directors consisting of the Governor, Deputy Governor, and twelve others, all appointed for terms of three years by the Minister of Finance with the approval of the Governor-General in Council. The Deputy Minister of Finance is an ex-officio member of the Board without vote. The Governor and Deputy Governor are appointed by the Board of Directors, also with the approval of the Governor-General in Council, for terms of seven years during good behavior. The Governor of the Bank is ex-officio Chairman of the Board and in that capacity has the unusual power to veto any decision of the Board, provided he informs the Minister of Finance of the circumstances within seven days. Any director or member of the Executive Committee may also inform the Minister in writing of his views, and this correspondence must be transmitted to the Cabinet, which then confirms or disallows the veto. The latter provision, a holdover from the short period at the beginning of the Bank's existence when the Bank was privately owned, is no longer considered essential or desirable.¹¹

Directors must be Canadian citizens not over seventy-five years of age, “selected from diversified occupations” outside the federal and provincial public services, and may not be directors, officers, or shareholders of a chartered bank. In practice, selections have been regional, with two directors coming from Ontario and Quebec and one from each of the other provinces. Because of the long distances involved, the Board of Directors usually meets only eight times a year, but an Executive Committee meets weekly. It is composed of the

¹⁰ *Ibid.*, p. 56.

¹¹ *Report of the Royal Commission on Banking and Finance* (Ottawa, 1964), p. 551.

Governor, Deputy Governor, one director, and the Deputy Minister of Finance (without vote) and acts for the Board between meetings.

In the United States the control of the Federal Reserve System and its relation to the Federal Government are somewhat more complex. The seven members of the Board of Governors (formerly the Federal Reserve Board) are appointed by the President with the advice and consent of the Senate for terms of fourteen years and are not eligible for reappointment after serving a full term. Not more than one member may be from any one Federal Reserve district, and in making his appointments "the President shall have due regard to a fair representation of the financial, agricultural, industrial, and commercial interests, and geographical divisions of the country."¹² The original act provided that at least two of the five members appointed by the President should be "persons experienced in banking or finance," but this provision was eliminated in 1922. The President designates one member as chairman and one as vice-chairman of the Board for terms of four years. "The chairman of the Board, subject to its supervision, shall be its active executive officer."¹³

Among the more important powers of the Board are these: (1) to participate, as members of the Federal Open Market Committee, in formulating policies governing open-market operations; (2) to set, within limits established by law, reserve requirements of member banks; (3) to set maximum interest rates member banks may pay on time and savings deposits; (4) to approve the discount rates of the Federal Reserve Banks, which must be set every fourteen days; (5) to suspend or remove officers and directors of the Federal Reserve Banks; (6) to exercise general supervision over the Reserve Banks; and (7) to set margin requirements on securities traded on national securities exchanges.

The presidents of the twelve Federal Reserve Banks play a significant role not only in the administration of policy as chief executive officers of the Banks, but also in the shaping of policy as members of the Open Market Committee, on which they serve in rotation, five at a time. The presidents are elected by the boards of directors of the respective Banks, subject to the approval of the Board of Governors. Three of the nine directors of each Bank are appointed by the Board of Governors, the other six being elected by the member bank stockholders. No di-

¹² *Federal Reserve Act*, Sec. 10, par. 1.

¹³ *Ibid.*, Sec. 10, par. 2.

rector appointed by the Board may be an officer, director, employee, or stockholder of any bank. One director serves as chairman, and he must be a person "of tested banking experience."¹⁴

The Federal Open Market Committee is an unusual joint board. It is composed of the seven members of the Board of Governors and five Reserve Bank presidents and has full power to shape open-market policy. It usually meets every three weeks and is attended by the twelve Bank presidents and a number of senior staff officers. In addition to setting open-market policy, the Committee discusses other relevant matters, and all Bank presidents, whether or not members of the Committee, may offer opinions and advice on matters of joint interest as well as matters within the exclusive jurisdiction of the Board. Thus, the Committee is an unusual arrangement whereby all major elements of the System keep informed on current developments and policy, contribute information and advice, and participate in the formulation of policy.

Along with other extensive changes, the Banking Act of 1935 made a major change in the governing board. Until that time the Secretary of the Treasury had been ex-officio a member and chairman of the Federal Reserve Board, and the Comptroller of the Currency was also an ex-officio member. Apparently this was not a matter of controversy at the time the System was established and, in view of the functions originally contemplated for the Board, it was logical. But by 1935 sentiment had changed. Again, it was not a matter of great controversy, and opinion was heavily in favor of removing the two men from the Board. Most witnesses thought the two men could not give adequate time and attention to their responsibilities and that they exerted an undesirable political influence on the Board. Professor Sprague offered the opinion that better men could be obtained to serve on the Board if the Secretary were not a member.

On the Senate subcommittee conducting the hearings which led to the Banking Act of 1935 were two former Treasury secretaries, Glass and McAdoo, and both favored excluding the Secretary and the Comptroller from the Board. Senator Glass offered these comments:

I have always been in favor of that, and for the reason that when I was Secretary of the Treasury—I would not say . . . that I dominated the Board, but I, at least, had considerable influence with the action of the Board, and I have suspected . . . that frequently since the Secretary

¹⁴ *Ibid.*, Sec. 4, pars. 15 and 20.

of the Treasury has had too much influence upon the Board, and I do not think he ought to be there.¹⁵

Owen D. Young said that in principle he favored excluding the two men but thought they should be retained for the time being because of special conditions. Two members of the Federal Reserve Board favored retaining both men because of the close relationship of their work to the System, the importance of the Treasury as a depositor, and the need for the System to keep in touch with Treasury policy. The 1935 Act omitted the two men from the reorganized Board, effective early in 1936.

In 1964 a bill, which gained some support, was introduced to reinstate the Secretary as chairman of the Board of Governors. Spokesmen for the System, however, unanimously opposed it, as did Secretary Dillon, who offered these comments:

Proposals of this kind also raise the possibility that decisions of monetary policy . . . will at times, consciously or unconsciously, be biased by the constant pressures on the Secretary of the Treasury to assure the economical financing of the dominant borrower in our economy—the Federal Government itself. . . .

Finally, and perhaps most fundamental to a resolution of this issue, experience over many years and in many countries has taught the wisdom of shielding those who make decisions on monetary policy from day-to-day pressures.¹⁶

The particular bill in question and several others which would have made far-reaching changes in the composition and procedures of the Board and its relation to the government were the subject of extended hearings but no action was taken on them in 1964.

The above examples deal with four important central banks and the general nature of their relations with their respective governments. The list could be greatly extended, and differences would be found in almost every case. But this brief discussion is perhaps sufficient to convey some idea of the broad pattern of relationships between governments and central banks. In any case, limitations of space prevent consideration of additional cases.

¹⁵ *Banking Act of 1935: Hearings before a Subcommittee of the Committee on Banking and Currency, United States Senate* (Washington, 1935), p. 90.

¹⁶ *The Federal Reserve System After Fifty Years: Hearings before the Subcommittee on Domestic Finance of the Committee on Banking and Currency, House of Representatives* (Washington, 1964), pp. 1231–1232 (cited hereafter as *Hearings*).

III

In the complex relationship of central banks to governments, two other powers are important: (1) the power of some political officer of the government to remove or dismiss top executive officers or directors of the central bank; and (2) the power to resolve deadlocks which may develop between the bank and the government. This section will briefly examine these two powers.

In most cases the laws are either silent or very broad and general with respect to the power to dismiss. However, this does not mean, even in those cases where the law seems to assure tenure for bank officials and directors, that the government does not have any power to bring about the removal of such persons. This might be accomplished in any one of several ways. Direct or indirect political pressure might be exerted on the parties involved, or the situation might become so uncomfortable that the bank officials would resign. As the Canadian Royal Commission expressed it, "We take it that any Governor who found himself in clear and basic disagreement with the views of the Government would resign, whether or not a directive were actually used."¹⁷ In a few cases the government has the power to issue directives to the central bank. Failure to follow such directives presumably would give the government the right to remove the offending official, and the law so states in the Netherlands. Finally, in a few cases, as with the Bank of France, appointments of the top bank officials are indefinite in term, and this might be construed to include the right to terminate them at any time.

Belgium affords one of the few cases where there is a clear power of dismissal. "The government's right to nominate and remove the Governor is unrestricted both *de jure* and *de facto*."¹⁸ The General Manager and the Deputy General Manager of the Bank of Italy may be dismissed by the Board of Directors, but those directors are elected by the stockholders, which are public-law corporations. Such dismissal, as well as appointments, can be taken only at a special meeting of the directors, subject to specific formal safeguards, and the action must be

¹⁷ *Report of the Royal Commission on Banking and Finance*, p. 551.

¹⁸ *E.E.C.B.*, p. 16.

approved by the Cabinet and confirmed by a decree of the President of the Republic on the recommendation of the Prime Minister.¹⁹

In at least three cases officials of the central bank seem, at least by implication, to be assured of tenure under ordinary circumstances. In England, "the Governors and Directors are secure in their term of office, subject to the disqualifications laid down" by law.²⁰ In the United States the members of the Board of Governors of the Federal Reserve System are appointed for terms of fourteen years, "unless sooner removed for cause by the President."²¹ The Governor and Deputy Governor of the Bank of Canada are appointed "during good behaviour." The recent Royal Commission held that this means that they "can be removed only by special legislation or a joint address of both houses of parliament. This is admittedly a somewhat cumbersome and embarrassing procedure but there is no reason why it should be easy for a government to get rid of its central bankers without valid cause."²²

Since in most cases it is difficult, embarrassing, or even impossible for the government to dismiss top central bank officials, it is always possible that a serious disagreement between central bank and government may develop into an impasse. This has happened in a few cases, causing a partial paralysis in the formulation of the government's financial policies. In two countries—England and the Netherlands—appropriate treasury officials have power in such circumstances to issue directives which the central bank is obliged to follow. In neither case has the power ever been used. In New Zealand the Minister of Finance has the power, as a routine procedure, to dictate the policy of the Reserve Bank. In Australia, if there is a difference of opinion between the Commonwealth Bank and the government, the two are required by law to "endeavor to reach agreement." If this is impossible by discussion, "the Treasurer may inform the Bank that the Government accepts responsibility for the adoption by the Bank of a policy in accordance with the opinion of the Government" and for taking such action as may be necessary to see that it is carried out.²³

In Canada there are no similar provisions of law but the same result

¹⁹ *Ibid.*, p. 191.

²⁰ *Ibid.*, p. 99.

²¹ *Federal Reserve Act*, Sec. 10, par. 2.

²² *Report of the Royal Commission on Banking and Finance*, p. 551.

²³ Kriz, *op. cit.*, pp. 566–567.

has been obtained by voluntary action. In 1960 and 1961 there was a serious disagreement between the Governor of the Bank of Canada and the Minister of Finance concerning the respective powers and responsibilities of the Governor and the Minister. Ultimately the Governor resigned and when the new Governor took office he issued, with the prior knowledge of the directors and the Government, a statement which included these items:

. . . (1) in the ordinary course of events, the Bank has the responsibility for monetary policy, and (2) if the Government disapproves of the monetary policy being carried out by the Bank it has the right and the responsibility to direct the Bank as to the policy which the Bank is to carry out.²⁴

In commenting on this statement later, the Governor said:

. . . the Bank must be sufficiently independent and responsible in its operations to be able to withstand day-to-day pressures from any source. But in the longer run, if there should develop a serious and persistent conflict between the views of the Government and the views of the central bank with regard to monetary policy which, after prolonged and conscientious efforts on both sides, cannot be resolved, the Government should be able formally to instruct the Bank what monetary policy it wishes carried out and the Bank should have the duty to comply with these instructions. The exercise of this authority by Government would place on Government direct responsibility for the monetary policy to be followed. If this policy . . . was one which the Governor felt he could not in good conscience carry out, his duty would be to resign and to make way for someone who took a different view.²⁵

In most countries, including the United States, however, there are no such provisions or understandings and the solution of the problem must depend on *ad hoc* measures. Such measures produced the accord between the Treasury and the Federal Reserve System of the United States in March, 1951. In Germany

The Law makes no provision for the event of a prolonged conflict and serious differences between the government and the Bank. On this point the legislature took the view that a situation of this kind, which, to judge by experience, was likely to be most unusual, could not be resolved by watertight legal prescription but only by the common sense of the parties concerned, directed towards the economic interests of the country.²⁶

²⁴ *Annual Report of the Governor to the Minister of Finance for the Year 1961* (Ottawa, 1962), p. 3.

²⁵ *Ibid.*, pp. 3-4.

²⁶ *E.E.C.B.*, p. 57.

IV

It may be well at this point to note briefly the suggestions of certain study groups which have recently considered the problem of government-central bank relations.

The Radcliffe Committee considered the situation in England generally satisfactory but suggested somewhat closer co-operation between the Bank of England on the one hand and the Treasury and the Board of Trade on the other. It recognized the distinctive nature of the Bank's functions and operations but thought they should be carried out within the framework of the government's general economic policy. To this end it suggested a Standing Committee, "deliberative and advisory in character," composed of representatives of the Bank, the Treasury, and the Board of Trade which would "advise the authorities on all matters relating to the co-ordination of monetary policy as a whole."²⁷ Such an arrangement, it held, "suggests some diminution of the Bank's influence in policy making. In substance we think that there would be little change."²⁸ The Committee also thought that changes in the Bank Rate are the ultimate responsibility of the Chancellor of the Exchequer and that announcement of those changes should be made in the name of the Chancellor.

In the United States, the Commission on Money and Credit recommended closer co-operation between the Federal Reserve System and other agencies of the Federal Government, to be accomplished by significant changes in the structure and organization of the System. It recognized that "a strong advocate for the claims of monetary stability is needed within the government, and the central bank is the natural home of such advocacy. A measure of independence from the Treasury with respect to support of the Treasury securities market is a requisite, too, if the central bank is to exercise effective monetary control."²⁹ The Commission rejected suggestions to return the Secretary of the Treasury and the Comptroller of the Currency to membership on the Board and to give the President power to issue directives to the Board. They

²⁷ *Report of the Committee on the Working of the Monetary System*, p. 275.

²⁸ *Ibid.*, p. 276.

²⁹ *Money and Credit: Their Influence on Jobs, Prices, and Growth*. The Report of the Commission on Money and Credit (Englewood Cliffs, N. J., 1961), p. 85.

expressed a general dissatisfaction with the complex organization of the System's policy-making powers but made no major criticism of its performance. The Commission recommended the following changes, among others: (1) requiring all insured banks to belong to the System; (2) reducing the Board of Governors to five members with terms of ten years; (3) making the terms of the Chairman and Vice-Chairman of the Board coterminous with that of the President; (4) broadening and generalizing the qualifications for members of the Board and raising their pay; and, most important, (5) abolishing the Federal Open Market Committee and giving the Board of Governors full power over open-market operations and discount rates.³⁰ These changes would reduce the policy-making powers of the presidents of the Federal Reserve Banks to an advisory status and further centralize the policy-making powers within the System.

The recent Royal Commission on Banking and Finance in Canada recommended essentially the validation and formalization of the present informal arrangement whereby the Minister of Finance accepts ultimate responsibility for monetary policy, with the Bank of Canada having considerable freedom in managing that policy. "The Bank's monetary policy must be the government's policy," but "it does not necessarily follow that because the Bank is a policy arm of government it should be made a department of government." It cites two main "reasons for giving the central bank a measure of freedom within government":

. . . both residents and non-residents . . . look to an independent central bank as a guarantee that market dealings are not being undertaken for day-to-day political considerations unrelated to the broad aims of monetary and financial policy. . . . The main reason, however, . . . has been the historical tendency of governments of all forms to develop the habit of inflating the currency. Since the process of inflation is understood by relatively few people and since it has few other organized opponents in our society, a special responsibility is imposed on the central bank to see that the objective of price stability is not forgotten by government merely because other goals have more political popularity in the short-run.³¹

The directive which the Minister of Finance might issue "should be used only as a last resort and after extensive and conscientious attempts to reach agreement have failed." It should

take the form of an order-in-council to ensure that it receives cabinet consideration; . . . be as specific as possible in its terms . . . ; be pub-

³⁰ *Ibid.*, pp. 87-90.

³¹ *Report of the Royal Commission on Banking and Finance*, pp. 540-541.

lished with the briefest of delays, say within 15 days of issue; . . . be accompanied by a statement from the Governor setting out his opinion of the matter; and . . . should automatically lapse after 30 days so that it would not become in effect a continuing directive.³²

The Commission recommended broadening the qualifications of directors, extending their terms from three to five years, repealing the prohibition of holding stocks in chartered banks, and making more effort to recruit men of outstanding ability. They should retain their responsibility for making policy because the government would not be able to attract men of the necessary judgment "if they are to be only glorified management consultants who learn of policy always after the event and who—while useful for window-dressing—can be freely ignored for other purposes."³³

Each of these groups has recommended measures which would move the central bank in the direction of more integration, or at least co-ordination, with the other financial agencies of the government. But each group contemplates a central bank which is a separate entity with a considerable autonomy or freedom to formulate and administer monetary policy, unless and until that policy is determined to be in basic conflict with government policy. In Canada and England that conflict would be resolved on the treasury's terms but only after the matter had been thoroughly considered at the highest levels and exposed to public attention.

V

In this final section two tasks will be attempted. First, an effort will be made to answer the question raised earlier: Why do almost all governments of the free world treat the organization and administration of the monetary power in a distinctly different way from other major functions of the state? Second, some consideration will be given to the basic factors which should govern the relations between a government and its central bank. The two subjects are closely related and often overlap.

As noted earlier, the principal elements of a government's monetary power are, in almost all advanced countries, exercised by a central bank. Those banks are invariably separate entities and are governed or

³² *Ibid.*, p. 543.

³³ *Ibid.*, p. 545.

guided by various executive or advisory boards or councils which possess a considerable degree of freedom or autonomy. No bank is headed by a cabinet member. This contrasts sharply with the agencies which exercise the defense, foreign relations, or fiscal powers. No complete or definitive explanation can be given for these differences, but some reasons may be suggested.

Perhaps the most important reason is the age-old suspicion, held by the citizen-voters, of the inflationary tendencies of government, especially of the executive branch. The public wants a group of competent men, not dominated by political pressures of the government in power, who will know what is going on and who will have some voice in shaping monetary policy. The more sophisticated citizens realize that there is a "money illusion" and that, as the Canadian Royal Commission stated, only a relatively few understand the process of inflation, and hence the central bank has a special responsibility in this respect.

Various counterarguments are brought against this point. It is contended that modern governments have assumed such a wide range of activities and acknowledge such great responsibility for the economic and financial climate that executive branches must have the monetary power complete. Furthermore, it is contended, modern governments have a higher standard of conduct and executives can be trusted not to abuse the monetary power. The record of governments which have not erected strong central banks does not bear this out. Another argument is that there is nothing peculiar about the monetary power and that it is not significantly different from other sovereign powers. One witness at the 1964 hearings on the Federal Reserve System stated: "The sphere of finance does not inherently contain greater dangers [of abuse] than those of, say, defense or public works."³⁴ This is wrong on two counts. Expenditures for defense and public works can be made only after hearings and appropriations—the matters must be aired. But if the executive branch has unlimited control of the monetary power it can quietly create money; in the nature of the case the legislature cannot keep a close rein on such actions. It is wrong also because of the money illusion. As the staff of the subcommittee conducting the above hearings stated in its summary: "Monetary economics is a complex subject and it would be difficult to explain to the general public how a slightly more expansive

³⁴ *Hearings*, p. 944.

policy could achieve a 1, 2, or even 3 per cent fall in the rate of unemployment.”³⁵ It might also have added “or a ruinous inflation.”

Another point, advanced by the witness mentioned above, is that the argument for the central bank’s power to check inflation “is a plea for the independence of the central bank in setting its basic policy, not merely its day-to-day operations. Such a view cannot be logically held by anyone who believes that the policies of the central bank and the Government must be harmonious.”³⁶ This implies that at times the policy of the government may be to follow an inflationary course. This is rarely, if ever, true and never so announced. As Maurice Frère, former Governor of the National Bank of Belgium, has stated: “. . . we may wonder why this aim of monetary stability is not pursued with greater energy and conviction, since all governments never cease to declare that they are in favour of it—even when the policy they are pursuing is bound to have the opposite result.”³⁷ So one of the purposes of this power of the central bank is to “keep the government honest” by bringing pressure on it to adhere to its announced policies.

A second reason for the special treatment of the monetary policy is the need of the fiscal authorities for independent, expert counsel on the highly technical and complex matters of monetary policy. With all of their duties in the fiscal area, finance ministers cannot be expected to have sufficient time to keep adequately informed on all the problems of monetary policy. If the central bank were a subordinate bureau in the treasury, it would not attract men of sufficient ability and experience nor afford them the prestige and influence required to give the minister the kind of advice he needs with the force it should have. Its officials would be merely “hired hands” of the minister.

A third reason is that monetary policy should be shaped to meet the needs of the whole economy and not just those of the fiscal authorities. As the Canadian Royal Commission put it:

The central bank also has an important responsibility to encourage the development of an efficient and flexible financial system to serve the needs of the economy as a whole as well as the special requirements of the policy makers. This . . . makes it imperative that the central bank be market-oriented as well as policy-oriented if it is to be really useful. Normally some

³⁵ *Proposals for Improvement of the Federal Reserve . . .* (Washington: Government Printing Office, 1964), p. 22.

³⁶ *Hearings*, p. 944.

³⁷ Maurice Frère, “Economic Growth and Monetary Stability,” *International Financial News Survey* (Supplement) XVI (Nov. 20, 1964), 422.

measure of independence will encourage a central bank to develop the vigour and freshness of approach, the technical competence and flexibility, and the basic understanding of market forces and attitudes needed to discharge these functions effectively. Dealing with markets, unlike many other aspects of financial policy, involves continuous decision-making and cannot be done on any sensible basis if all transactions are subject to prior approval by a responsible Minister or the cabinet.³⁸

To know the needs of the market, to evaluate them, and to weigh them against the needs of the treasury requires men outside the immediate control of the fiscal authorities.

Finally, there is the point made by the Radcliffe Committee. It notes that the Bank of England has a "special relationship with the markets in which it is at once an operator and to some extent a controller and . . . these operations impose upon it a form of internal organization which is much closer to that of a business enterprise than that of a department of the civil service."³⁹

All of these factors, and no doubt many others, have operated, in varying degrees at different times and places, to produce the specific forms, organizations, and powers which central banks around the world have today. And those characteristics will almost certainly continue to evolve because, as the Radcliffe Committee pointed out, ". . . the problems involved in relating the authority of a central bank to the executive government of the State are not static ones and it would be surprising if at any one moment of their changing history any permanently satisfactory balance had been achieved."⁴⁰

From the foregoing discussion it is evident that it is not feasible to formulate broad, general principles concerning the relationships between central banks and governments which will be applicable in all countries. Conditions differ widely from country to country, and those differences affect the kind of relationships which are desirable and workable. The government-central bank relationship is an intensely practical one, heavily dependent on prevailing conditions, and any arrangement which disregards them is not likely to prove satisfactory.

Variations in the form of government probably constitute the most important difference between countries affecting government-central bank relations. In a democracy the legislative branch of the government usually exercises the money power. Where there is a division of powers, as in the United States, the location of the central bank in the

³⁸ *Report of the Royal Commission on Banking and Finance*, p. 541.

³⁹ *Report of the Committee on the Working of the Monetary System*, p. 274.

⁴⁰ *Ibid.*, p. 272.

executive branch would amount to a delegation of the money power by the legislative to the executive branch. This could result in a monetary policy contrary to the wishes of the legislature, since it is not uncommon for the legislative and executive branches to be controlled by different political parties. But under a responsible or cabinet form of government such a division is not possible since both executive and legislative powers are joined under the control of parliament. Further, if the voters should be strongly displeased with the monetary policy of the government, the matter could be brought to issue and the government required to change its policy or be voted out of power.⁴¹ Hence it would seem much more feasible and logical to give the treasury control over the central bank under a cabinet form of government than under one with a system of checks and balances and fixed terms for executives and legislators.

Another group of pertinent conditions includes the structure of the banking system and the organization, maturity, and sophistication of financial institutions and the money market. These influence the speed with which financial data can be collected, the techniques which the central bank must use to implement its policies, the speed and effect with which informal suggestions of the government and central bank are received, the mobilization and expression of financial sentiment, and the volume of the service functions the central bank must perform. All these factors constitute the financial environment in which the central bank must operate. They differ in each financial center and are vital to the success of any given arrangement between central bank and the government.

A final group of conditions covers the traditions, precedents, and political climate of the country and the availability of able, experienced men of integrity to serve as officers and directors of the central bank. These conditions determine what Kriz describes as "the sense of responsibility displayed by political and business leaders and the level of political education of the people."⁴² They determine whether it will be possible to recruit able central bankers who will have a high sense of duty and purpose, who will give proper weight to their public responsibility, and who will provide the necessary liaison between the

⁴¹ Sweden is probably the only country in which the parliament, as a regular procedure, receives, debates, and approves the annual report of the central bank. "In practice, the right to reject the report has never been exercised, but the debate offers an opportunity for discussing the policy of the Bank." *E.E.C.B.*, p. 313.

⁴² Kriz, *op. cit.*, p. 576.

governmental and financial sectors. If such men are not available, the government may, by default, be required to operate the central bank as a government department. Of course, there is no magic process by which such men are created by investing them with governmental authority, and the deficiencies of governmental operation may result in a most inadequate performance by the central bank as a strictly governmental agency.

In view of these many differences between countries, it may properly be asked whether there are any broad principles which are generally applicable in the area of government-central bank relations. Logic and the experience of nations would seem to point to a few which are generally valid and helpful. The first of these is that the central bank should not be operated as a department in the executive branch of the government or as a bureau or minor division of such a department. Several reasons for this have already been noted: the suspicions of the people, the need for adequate attention to the needs of the private sector of the economy, and, if the bank is in the ministry of finance, the lack of time and understanding by the minister of finance. In addition, the national government is usually the largest, the most necessitous, and most continuous borrower in the financial market. The minister of finance is put in a most difficult position if he must, in effect, be on both sides of the table, trying to get the most advantageous interest rates on his borrowings and at the same time maintain a level of interest rates which is best for the whole economy. He will know most about, and probably be most concerned with, the needs of the treasury and therefore may tend to give them preferential treatment.⁴³ Second, as a cabinet officer or a high official of the government of the day, he will be an important personality of the political party in power. As such, he will be subject to strong short-run partisan political pressures. How this may work out is illustrated by an excerpt from a recent confidential analysis by the staff of one central bank of the situation in another country. "Because an expansionary budget is

⁴³ "Ministers of Finance and those responsible for monetary policy are bound, by very reason of their differing responsibilities, sometimes to have divergent views on how to resolve the big financial problems. The former, who have to take certain political factors into consideration, will tend to regard these problems in a short-term context without being able to concern themselves too much with the longer-term consequences of their decisions. The others, on the other hand, by reason of the permanent nature of their office and the technical background they must possess, will generally take fuller account of the longer-term implications of their decisions.

"It is the confrontation of these two viewpoints that will ultimately enable the best solution to be found to the problems to be solved." Frère, *op. cit.*, p. 425.

evidently a political necessity in this election year, the authorities will have to depend chiefly upon restrictive central bank policies to keep the inflation potential in hand."

At the other extreme, a second principle is that the central bank may not be independent of the government which creates it. The central bank wields a major element of the sovereign power, and it is absurd to think of the legislature delegating that element to an entirely independent body. This principle is so well established and so generally accepted that perhaps it requires no further demonstration.

These two principles are fairly definite and specific. Beyond them it is not feasible to be dogmatic or all-inclusive. The principles deal with differences in degree rather than kind. Perhaps a third principle could be that the relationship should be one which would enable the central bank to recruit and hold men of ability, experience, and integrity. Good monetary policy is above all else a matter of men; good policy requires men of ability, perception, and sound judgment, regardless of where they may be located in the governmental hierarchy. Central banking is not something which can be learned in a few weeks or a few months. Good central bankers must be career men, not subject to the vicissitudes of political successes and defeats. Men of the caliber required will not be attracted by the position of a bureau chief in a government department. It has been said that, at least in the business and political worlds, men are interested in, and will put forth their best efforts for, only those things for which they are responsible. All of this means that the government-central bank relationship should be such that, on the central bank side, it will attract and hold men of the kind described above. Such men would not accept a post in which they might be arbitrarily overridden by a political superior or in which their counsel might be lightly brushed aside. They must be given powers and responsibilities commensurate with the importance of the work they are asked to do.

Another principle is that the formal and legal power of a political official over monetary policy should be definite and clearly defined, and that he must have a responsibility commensurate with his power. A most important part of those arrangements which allow a minister of finance to issue a directive to the central bank is that the issues between the two must be discussed openly and that the minister must assume responsibility for the policy he orders. The practice of making the minister of finance or the secretary of the treasury a member of

the governing board of the central bank evades both of these points. Controversial matters are fought out behind closed doors and the minister may (or may not) be able to exert undue influence on the other members of the board, but in any event the responsibility is always on the board as a whole and never on the minister as such.

A final principle is that the relationship between government and central bank should be as flexible as conditions will permit. It is not feasible to make frequent changes in central bank charters, but practices and ideas, both financial and political, change rapidly. It would be most unwise to freeze into the provisions of law the details of the philosophy, the conventions, and the political fads of a particular period.

Leonard S. Silk* *The Role of the Business Corporation in the Economy and Society*

" . . . Believe me, my darling, there's nothing screwy or complicated about my viewpoint or any other sensible banker's, maligned as we always are. Horse-sense is what we need, horse-sense is what we admire, and horse-sense is what we have. Enough, thank you, consistently, to keep off you with your hearts too big for your heads and all those liberal young men . . . with guilty sociological consciences, Oxford accents, and economic theorists' doubtful rules of thumb."

JAMES KENNAWAY, *The Bells of Shoreditch*

MOSCOW, March 22—The New Soviet Government today appeared for the first time to be accusing former Premier Nikita S. Khrushchev of having been mistaken about Communist theory as well as practical policy. Kommunist, the ideological journal of the party's Central Committee, charged in effect that he had underestimated the importance of Marxist theory in running the country's affairs.

The New York Times, March 23, 1965

We in the West have learned to pay attention to the periodic outbursts over Communist ideology. As theoretical or abstruse as these debates may sound to those unlettered in Marxism-Leninism, they usually reflect—and sometimes foreshadow—major historical developments. By comparison debates among capitalists over their own ideology seem mild and are often dismissed as tiresome semantic exercises with little or no real-world significance.

Yet it is becoming apparent that an ideological controversy that in recent years has been agitating professors and the more articulate businessmen (and their still more articulate speech writers) does reflect a central political, economic, and business issue of our time: whether business is going to settle down to live in the mixed economy, co-operating with the Federal Government, organized labor, and other

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institutions in the society to achieve "national purposes," or whether it is going to try to reverse the trend toward a more holistic state by doing battle to regain greater independence from government control or other "outside" interference.

I

On the ideological level the debate has taken the form of an argument between proponents of the traditional "free enterprise" creed¹ and the more recent "social responsibilities" creed.² The free-enterprise creed holds that the aim of business is and should be to maximize profits, within the rules of the game set by law. In the words of a 1926 disciple of the creed, "It is inconceivable to a one-hundred per cent American that anyone except a nut should give something for nothing."³ Put more politely—as it is by such liberal (in the old-fashioned sense) or libertarian (as we say nowadays) economists as Professor Milton Friedman—this creed maintains that the pursuit of self-interest or maximum profits is still, as in Adam Smith's day, the most logical and efficient way to run a business—and the only way to preserve a free society. In Friedman's words:

Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible. This is a fundamentally subversive doctrine. If businessmen do have a social responsibility other than making maximum profits for stockholders, how are they to know what it is? Can self-selected private individuals decide what the social interest is? Can they decide how great a burden they are justified in placing on themselves or their stockholders to serve that social interest? Is it tolerable that these public functions of taxation, expenditure, and control be exercised by the people who happen at the moment to be in charge of particular enterprises, chosen for those posts by strictly private groups? If businessmen are civil servants rather than the employees of their stockholders then in a democracy they will, sooner or later, be chosen by the public techniques of election and appointment.

And long before this occurs, their decision-making power will have been taken away from them.⁴

¹ For a thorough exposition of the traditional "free enterprise" ideology, see Francis X. Sutton, Seymour Harris, Carl Kaysen, and James Tobin, *The American Business Creed* (New York, 1962).

² The "social responsibilities" ideology is discussed in Earl F. Cheit, ed., *The Business Establishment* (New York, 1964).

³ This was the view of William Feather, a publishing executive and regular contributor to *Nation's Business* in the 1920's; it is quoted in James W. Prothro, *The Dollar Decade* (Baton Rouge, 1954), p. 43, and in Cheit, *op. cit.*, p. 13.

⁴ Milton Friedman, *Capitalism and Freedom* (Chicago, 1962), pp. 133-134.

The new social-responsibilities creed, by contrast, holds that this free-enterprise, profit-maximizing philosophy is an anachronism. Critics of the old creed say that it made sense in the days of smaller companies, of something closer to free competition, and of foolish, tyrannical kings, but that it makes little sense in today's society where huge corporations play not only a vital economic role but also an important political and social one. These corporations cannot avoid having a major and conspicuous impact on society, which society will either approve or disapprove, permit or prevent. Hence, proponents of this new creed hold that if business wants to retain its autonomy, it must be prepared to assume certain social responsibilities. The businessman, say proponents of this view, must seek to co-ordinate his company's and his own private aims with the public interest. He can do this "and still be successful," says Thomas J. Watson, Jr., chairman of International Business Machines Corporation, who adds:

I would be the first to admit that it's a good deal easier to state this proposition than to put it into practice. One of our most important continuing problems is the question of how we can strike a balance between what is sound business practice in the management of our large organizations and what is good for the national interest. It is a dilemma which will confront us more and more often in the years ahead.⁵

⁵ Interview by the author with Thomas J. Watson, Jr., Feb. 6, 1965, at Armonk, N. Y. As background for this article, the author and members of the staff of *Business Week* conducted extensive interviews with forty-four business executives during the months of January, February, and March, 1965. Those interviewed, in addition to Mr. Watson, were: Richard Amberg, publisher, *St. Louis Globe-Democrat*; John A. Barr, chairman, Montgomery Ward and Company, Chicago; Joseph L. Block, chairman, Inland Steel Company, Chicago; Roger F. Blough, chairman, U. S. Steel Corporation, Pittsburgh; Harlee Branch, president, The Southern Corporation, Atlanta; William Carpenter, assistant to the president, Pittsburgh Plate Glass Company, Pittsburgh; James F. Chambers, Jr., president, *Dallas Times Herald*; Lamot du Pont Copeland, president, E. I. du Pont de Nemours and Company, Wilmington; Trammel Crow, developer, Dallas; Russel DeYoung, chairman, Goodyear Tire and Rubber Company, Cleveland; Cris Dobbins, president, Ideal Cement Company, Denver; Lew Dymond, president, Frontier Airlines, Inc., Denver; Aaron J. Farfel, investor and independent businessman, Houston; R. Gwin Follis, chairman, Standard Oil Company of California, San Francisco; Theodore R. Gamble, president, Pet Milk Company, St. Louis; Thomas S. Gates, chairman, Morgan Guaranty Trust Company, New York; Ben W. Heineman, chairman, Chicago and North Western Railroad Company, Chicago; Reed O. Hunt, chairman, Crown Zellerbach Corporation, San Francisco; Robert S. Ingersoll, chairman, Borg-Warner Corporation, Chicago; Frederick R. Kappel, chairman, American Telephone and Telegraph Company, New York; Robert W. Krueger, president, Planning Research Corporation, Los Angeles; Edward Lamb, industrialist, financier, and attorney, Cleveland; Mills B. Lane, Jr., president, The Citizens and Southern National Bank, Atlanta; Robert A. Lovett, partner, Brown Brothers and Harriman, New York; Gerald C. Mann, chairman, Diversa, Inc., Dallas; Arnold Maremont, president, Maremont Corporation, Chicago; J. W. McAfee, president, Union Electric Company, St. Louis; S. M. McAshan, Jr., president, Anderson, Clayton and Company, Houston; E. Clyde McGraw, president, Transcontinental Pipe Line Corporation, Houston; Phil Neff, vice president, Planning Research Corporation, Los Angeles; Thomas F. Patton, president, Republic Steel Corporation, Cleveland; Wallace R. Persons, chairman,

One of the most difficult aspects of the problem is to define the national or public interest. Skeptics ask: Is the national or public interest simply what the President of the United States says it is? Is he to be regarded as infallible, especially when there is no legal obligation to submit to his view? What if some White House aide or lesser official ventures to state the "public interest"? Should the citizen—including the head of a large corporation—accept this view? Is it necessarily true, in any case, that the public interest, however defined, is inherently superior to private interests? Must poets or composers give up their work—their private visions—to help clear the slums; or, more alarmingly, write odes to slum clearance and cease to serve the dictates of their private consciences and serve instead some patriotic public purpose? And, in the economic area, if inefficiency is held to advance the public interest, shall corporations become more inefficient? Shall individuals decide what to produce or consume and what goods or services are worth, or shall the State?

Those who raise such questions are, of course, in the great tradition of Adam Smith, who declared that the private citizen pursuing his own interest "frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good."

Businessmen in America remain instinctively Smithian. Even advocates of the new social-responsibilities creed rarely believe it is necessary to *subordinate* the quest for profit to the public interest, except possibly in times of war. In a great deal of interviewing of businessmen on this subject, I have found that nearly all contend that higher profits *serve* the public interest—by stimulating investment, accelerating economic growth, and creating more jobs.

Of course, many businessmen emphasize the importance of maximizing long-term, rather than short-term, profits. Thus, they say, in day-to-day business affairs, decisions must sometimes be made that will in the

president, and chief executive officer, Emerson Electric Company, St. Louis; Rudolph A. Peterson, president, Bank of America, San Francisco; Simon Ramo, vice chairman, Thompson Ramo Wooldridge Corporation, Cleveland, and president, The Bunker Ramo Corporation, Canoga Park, California; David Rockefeller, president, The Chase Manhattan Bank, New York; John H. Rubel, vice president and director of technical planning, Litton Industries, Inc., Beverly Hills, California; Stuart T. Saunders, chairman, Pennsylvania Railroad Company, Philadelphia; Herbert G. Schiff, partner, Bright and Schiff, Dallas; Joseph W. Simpson, Jr., president, The First Wisconsin National Bank of Milwaukee; Donald C. Slichter, president, Northwestern Mutual Life Insurance Company, Milwaukee; James Stewart, president, Republic National Bank, Dallas; and Robert S. Stevenson, chairman, Allis-Chalmers Manufacturing Company, Milwaukee.

short run cost the company something but in the long run will lead to the company's survival or growth. They sometimes extend this reasoning to corporate actions that might help create a growing national and international economy and thereby ultimately expand their own markets. One may, however, doubt that many businessmen have this sort of wide-ranging vision. Indeed, one prominent businessman put the matter this way: "All businessmen, on the make, aim at short-run profit maximization. When they've risen in the world enough to behave like statesmen, they aim at long-run profit maximization. But the real truth—the truth that a businessman will tell only to his wife or best friend—is that he still aims at short-run profit maximization." Certainly, there are strong pressures upon a business executive to produce continuous gains in corporate earnings in order to protect his own position in the company and to improve the value of the securities of his corporation in the stock market. Few business leaders, in my experience, even admit that they seek mere growth (or survival) rather than higher profits—but few, admittedly, like to talk in terms of "maximum" profits. They are more likely to say they aim at "good" or "fair" or "reasonable" profits—and in this respect they often sound like Professor Herbert Simon's "satisficing man." But whether they quite mean this or not is an open question. "Satisficing" may simply be profit-maximizing under the constraints of business competition, of customers with long memories, of the watchful antitrust authorities, of an exhortative President or other political pressures, and of the labor-union leaders who would otherwise help them to reduce "maximum" profits to "reasonable" levels.

American businessmen are determined not to appear soft-headed. Whether advocates of the social-responsibilities or the free-enterprise creed, they generally deny that they ever behave altruistically. In this respect, they appear to have changed not at all since the early nineteenth century when Tocqueville observed that "the doctrine of self-interest" found universal acceptance among Americans, who, he thought, often failed to do themselves justice.⁶ Even though he found that the Americans, like people everywhere, sometimes give way to "those disinterested and spontaneous impulses that are natural to man," Tocqueville reported that the Americans seldom would "admit that they yield to emotions of this kind; they are more anxious to do honor to their philosophy than to themselves." A century later Ameri-

⁶ Alexis de Tocqueville, *Democracy in America* (New York, 1945), II, 130–131.

cans put across the Marshall Plan to rescue a war-devastated Europe, while insisting that they were only following enlightened self-interest or “mutual” interest. Paradoxically, many of the same hard-headed Americans were outraged by the failure of Europeans to be more grateful for America’s professedly non-altruistic behavior.

Yet, despite their continued espousal of self-interested motives and their celebration of the need for higher profits, more and more American businessmen—especially the leaders of some of the largest corporations—are seriously seeking to come to terms with and to serve national interests that impinge upon their business interests. They insist that, whatever the definitional problems, there certainly is such a thing as the public interest—and that a good citizen should seek to discover and advance it as best he can. Joseph L. Block, chairman of the Inland Steel Company, declares that those individuals who deride the “public interest” as a “non-existent will-of-the-wisp, a self-serving device used by politicians to cloak ulterior objectives” are not only denying the need for private parties to consider the public interest but even the right of government to define the public interest.⁷ Such views, says Mr. Block, are “utter nonsense.” “Surely,” he adds, “the greater good of the nation as a whole should be of paramount importance to everyone and while no one has an omniscient power to define ‘public interest’ accurately at any given time, and certainly not all of the time, it surely behooves all of us—and most particularly government—to endeavor to do so.”

II

The real problem, however, is not to define the public interest in general terms but in relation to specific issues—and then to find the right private or public or private-cum-public policies for coping with those issues. This is a problem that appears constantly in new guises, as national issues and needs change. Lately the emphasis has been upon private-cum-public policies to meet national objectives. In an important speech to the Business Council at the end of 1964, President Johnson declared that government and business must “operate in partnership,” not as antagonists, to solve many problems, of which he said four were foremost: accelerating the rate of economic expansion;

⁷ Interview with Joseph L. Block, Jan. 4, 1965, in Chicago.

maintaining price stability; strengthening the United States balance of payments; and "finding ways to reduce the tragically high rate of unemployment among teenagers, and assuring adequate economic opportunities for all our people not now in the mainstream of American prosperity."

In attacking these problems, the President suggested, both government and business have distinct and important roles to play. Government's responsibility, he said, was to produce a tax system that would not overburden businessmen or consumers and would maintain incentives for productive effort; to shape expenditure programs that would improve human and natural resources and make those social investments that are "needed to support private enterprise"; and to keep a "clear field" for private business in areas where competitive enterprise is the most efficient way of getting a job done. Government, he emphasized, must develop fiscal and monetary policies that would promote balanced and stable growth and must be prepared to act "promptly and decisively when the nation is threatened by either recession or inflation."

Business's responsibilities, as defined by the President, included producing "high-quality goods" and "new and improved" items, cutting production costs, and vigorously selling goods at home and abroad. At the same time, he said, business should follow employment policies that would offer workers both job security and incentives to increase their productivity and incomes. Business should build investment programs that would contribute to smooth expansion and avoid inventory problems which "have often been a source of economic instability in the past."

But the President's definition of business's responsibilities for advancing the public interest did not stop with such non-controversial tasks. He included a plea to commercial banks not to raise the interest rates which they charge their customers. At that time the Federal Reserve had, for balance-of-payments reasons, just raised the discount rate, and the President was eager to keep the prime rate charged to domestic business borrowers where it was, for fear of slowing economic expansion. The President said he was sure bankers realized their own long-term interest was inseparable from the prosperity of the nation and warned that a recession might force the government to increase spending and further unbalance the budget.

The President also emphasized other ways that private business

could serve the public interest. It should respect the “non-inflationary” wage-price guideposts, first spelled out by President Kennedy’s Council of Economic Advisers in 1962. Private business should put forth extra effort to increase its exports; the President later supplemented this plea for help in closing the payments gap with a strong call for “voluntary” programs to curb bank lending and direct investment abroad. He also called for private business to end discrimination against Negroes in employment and to support increased educational and training programs for the poor.

Implicit in all these presidential recommendations and requests is the conviction that the free market does not provide satisfactory answers to many crucial economic and social problems facing the nation. To be sure, free-enterprisers would argue that government continuously undermines the free market and prevents it from doing its work of allocating resources efficiently and facilitating genuinely voluntary solutions to the nation’s critical economic and social problems. But champions of the social-responsibilities creed, while expressing their regrets about government interference in the marketplace, nevertheless have little faith that in an industrialized, large-organizational system the market can produce prompt and satisfactory answers to all economic and social problems. They prefer to seek workable answers rather than to waste time bemoaning the political or economic changes that have kept the “invisible hand” from doing its work.

However, there can be no doubt that the difficulties of determining just how to crack the nation’s outstanding economic problems are greatly aggravated by our ignorance of how the American political economy works. Clearly, we have statistical models—national-income models, input-output models, flow-of-funds models—that from varying perspectives seek to explain how the economy works. But none of these is at all satisfactory from the standpoint of showing where *power* resides in the system—both political power and economic power, since both of these are involved in shaping the decisions that do so much to determine whether the economy rises or declines, whether prices go up or down or hold firm, whether funds flow abroad faster or slower, whether Negroes find it difficult or easy to get certain jobs, whether investment flows to particular regions, whether government spending will be boosted and for which programs, whether taxes are cut or raised, and whose taxes are cut or raised, whether money will be tightened or relaxed—and who will have more or less difficulty in making loans.

The job of building such a "power" or "decision" model of the U. S. economy staggers the imagination, but it is one that needs to be undertaken. Some writers have begun the job of analysis of power in the system—the kind of investigation of politics and business that the "muckrakers" undertook at the turn of the century. This is not to say that the study should be a journalistic "exposé" of the system. Rather it should be a deep economic, sociological, and political analysis of the structure and functioning of the system. It should employ the skills of social scientists—but these must be combined with those of a first-rate reporter.

The study's main objective would be to show, as clearly as possible, the dynamics of the American political economy, in broad design and in detail. Our economy has apparently been growing more closely integrated and holistic, and this trend creates the setting in which individuals who head important business or financial institutions may exert some greater degree of control over the system. One student of this trend, Father Paul P. Harbrecht, suggests that the American economy now consists of three different but interlocking systems.⁸ The *primary* system, in his view, is made up of the network of large manufacturing and service corporations; these finance themselves to a large extent through depreciation allowances and retained earnings and may even provide financing for their own consumers. The *secondary* system consists of the markets for corporate stocks and bonds, mortgages, and all other forms of debt instruments. The *tertiary* system, according to Harbrecht, includes the financial intermediaries that began as services to business but that have so evolved as to permit individuals, including workingmen, to participate more fully in the operations of the primary and secondary systems—that is, through their shares in savings and loan associations, pension funds, mutual funds, life insurance companies, and credit unions.

The capitalist system, as Harbrecht says, "seems well on the way to digesting itself." All the financial institutions have been increasing their stockholdings rapidly; each year since 1959 the private pension funds alone have spent considerably larger sums of money to purchase stock than all individuals together. The financial institutions now own about 80 per cent of all outstanding corporate bonds.

The growing interdependence of the major components of the American economy appears to have a "taming" or "civilizing" effect

⁸ Paul P. Harbrecht, S.J., "The Modern Corporation Revisited," *Columbia Law Review*, LXIV (Dec. 1964), 1410-1426.

upon corporate executives. Although it may be true, as Berle and Means sought to show, that corporation managers are largely free of direct stockholder control, indirect pressures are possibly greater than ever. Corporate officers are extremely eager to see the value of their company's securities appreciate in the market—and not only because they themselves may have significant stock holdings or stock options. In part, corporate executives like to see the value of the company's securities appreciate because this makes everything about their job easier—easier for them to raise additional capital in the market, if it is needed; easier to justify salary increases for themselves; and easier to launch investment programs or start new ventures that will increase the growth of their company. Further, executives often develop an intense loyalty to their corporations that goes beyond their personal enrichment, though personal and corporate goals are bound up together. Business executives appear to “internalize” the aims of their institutions, just as do most university professors, labor leaders, or preachers. Corporate executives usually suffer mental stress when they see the value of their corporation's securities fall. And they know that this may shake confidence in their ability not only among stockholders and their own directors but also among their suppliers, customers, bankers, and the other financial institutions from whom they might need support. One who works for a large corporation knows full well that when profits are high and rising, life is exhilarating and nothing can be denied the enterprising manager and employee; and when sales and profits are falling, life grows grim within the corporation—and heads may roll.

Increasingly, executives of large corporations are coming to see that, if they are to keep their own company's sales and profits growing, it is essential to keep the entire economy stable and growing. In many important respects, they see that their corporate interests are becoming consonant with those of other groups in the system—that is, with the interests of political leaders who are pressed to produce full employment, stable prices, and balance-of-payments equilibrium; of labor leaders, who must strive to gain job security and rising incomes for their union's rank-and-file; of other producers, who want the demand for their own products (dependent upon the incomes of the masses of the population) to be high and rising; and of the managers of the banks, the life insurance companies, the pension funds, savings and loan associations and other financial institutions, who want to be sure

that savings continue to flow to them and that their own investments produce stable or rising returns. In this interdependent system, the nation's business leaders begin to see a clearer need to concert their aims with those of other important policymakers, whether in business, banking, government, politics, labor, education, or other institutions.

III

Indeed, many observers contend that the American corporate world, and the American society generally, is now controlled by an elite. However, perspectives on this alleged elite vary greatly. Leaders of the Civil Rights movement refer to it as "the white power structure," with emphasis on its racial composition. C. Wright Mills called it a "power elite" and saw it as a conservative or reactionary force in America.⁹ President Eisenhower, curiously enough, in his Farewell Speech warned about the "military-industrial complex," a group that was forcing the nation's economy toward excessive dependence on the government budget, especially the defense budget. Richard H. Rovere, in a waggish essay called "The American Establishment," suggested that this elite was a group spanning a political spectrum from slightly left of center to slightly right of center, a group that ran the society, more or less, as does the British Establishment; the "secret" American Establishment chairman, joked Rovere, was John J. McCloy, "Chairman of the Board of the Chase Manhattan Bank; once a partner in Cadwalader, Wickersham & Taft and also in Cravath, de Gersdorff, Swaine & Wood, as well as, of course, Milbank, Tweed, Hope, Hadley & McCloy; former United States High Commissioner in Germany; former President of the World Bank; liberal Republican; chairman of the Ford Foundation and chairman . . . of the Council on Foreign Relations; Episcopalian."¹⁰ Religion apparently plays a role; in fact, E. Digby Baltzell calls the elite "The Protestant Establishment."¹¹ However, William R. Buckley and the editors of the right-wing *National Review* see the Establishment as a kind of liberal conspiracy; and

⁹ C. Wright Mills, *The Power Elite* (New York, 1956).

¹⁰ Richard H. Rovere, *The American Establishment and Other Reports, Opinions, and Speculations* (New York, 1962).

¹¹ E. Digby Baltzell, *The Protestant Establishment: Aristocracy & Caste in America* (New York, 1964).

Senator Barry Goldwater, during the 1964 presidential campaign, suggested that it was an eastern Establishment, dominated by Wall Street tycoons. Even a subcommittee of the Congress in 1965 employed such terms as "power elite" and "business establishment" to describe the men who allegedly are most influential in controlling American economic life.

This Congressional subcommittee, working under Rep. Emanuel Celler of New York, had been probing into the fact that large corporations usually draw upon a relatively limited group of businessmen for their directors. The report cautiously noted that there was no evidence that these management "interlocks" had adverse social or economic consequences. Nevertheless, it suggested the desirability of legislation to extend the coverage of the Clayton Antitrust Act to guard against possible abuses.

But is there anything new in all this? Fifty years ago the Populists rang some of the same notes when they wrote prohibitions against interlocking directorates into the Clayton Act. Before World War I, a Congressional committee found that an "inner group" of 180 financial leaders held a chain of 746 directorships in 134 of the nation's largest corporations. In 1913 the Pujo Committee—a subcommittee of the House Committee on Banking and Currency, headed by Arsene P. Pujo—suggested that there was a "money trust" that had come about as the result of an "insidious monopolistic scheme." The Pujo Committee declared that it was a "fair deduction" from the testimony that "the most active agents in forwarding and bringing about the concentration of money and credit" through various means, including interlocking directorates and "influence," included J. P. Morgan & Co.; the First National Bank of New York; the National City Bank of New York; Lee, Higginson & Co.; Kidder, Peabody & Co.; and Kuhn, Loeb & Co.¹² To these charges J. P. Morgan & Co. submitted a reply (which the subcommittee refused to print), declaring:

The testimony failed to establish any concerted policy or harmony of action binding these 180 men together, and as a matter of fact no such policy exists. The absurdity of the assumption of such control becomes more apparent when one considers that on the average these directors represent only one quarter of the memberships of their boards. It is preposterous to suppose that every "interlocking" director has full control in every organization with which he is connected, and that the majority of directors

¹² *Report of the Committee . . . to Investigate the Concentration of Control of Money and Credit*, House Report No. 1593, 62nd Congress, 3rd Session, 1913.

who are not "interlocking" are mere figureheads, subject to the will of a small minority of their boards. . . .¹³

The Morgan reply declared that for a private banker to sit upon a directorate "is in most instances a duty, not a privilege." The banks and leading investment houses, it said, were continually being pressed for representatives to serve on the boards of corporations whose securities they handle, and in general they accepted directorships only on those boards "which the opinion of the investing public requires them to enter, as an evidence of good faith that they are willing to have their names publicly associated with the management." There was nothing at all sinister, said J. P. Morgan, about "this natural and eminently desirable relationship."

In 1965 the staff of the Celler Committee, after examining the boards of 74 of the largest industrial companies, banks, and insurance companies, calculated that their 1,206 board members had a total of 4,608 management links with other companies. Moreover, there was a great deal of interlacing of boards within the group of 74; some 182 businessmen held down a total of 425 directorships in the group. The directors and officers of American Telephone & Telegraph had 104 management ties; those of its manufacturing arm, Western Electric Co., had 37. Management of Western Electric was connected with 91 other companies; that of General Electric with 84. But the number of links varied greatly from company to company: Bethlehem Steel Corporation had a completely "inside" board, and the oil companies generally seemed to discourage too many outside ties.

The Celler Committee did not suggest that these corporate links were illegal. The Clayton Act bans a sharing of directors only between competitors, but it does not proscribe "vertical relationships" where a director from an industrial goods company may be serving on the board of a major customer; and it is silent on "indirect links," where, for instance, directors of the three major automobile companies may meet together in the board room of Morgan Guaranty Trust Co. But, while the Celler report conceded that adverse effects of corporate links are not apparent, it stated:

It would be naïve not to think that the ability of two corporations to compete is not impaired by common management members; that individuals who occupy top management positions in corporations that deal with

¹³ *Letter from Messrs. J. P. Morgan & Co., in response to the invitation of the Subcommittee (Hon. A. P. Pujo, Chairman) of the Committee on Banking and Currency of the House of Representatives, New York City, February 25, 1913, p. 9.*

each other will not have their judgments beclouded by considerations that affect their own financial interests; and that an individual who is too busy to appear at the board meetings does not debase the management of the corporations he serves.¹⁴

The report suggested bringing corporate officers as well as directors within the reach of the Clayton Act and extending the prohibition itself to include "vertical" and "indirect" management interlocks.

Yet the report did not begin to deal with the old question that the Pujo Committee came up against of whether interlocks—and the existence of a business elite—is nefarious and against the public interest or natural and desirable and no evidence whatsoever of a monopolistic "money trust." Once again we are up against the classic riddle of whether the modern industrial economy needs more, rather than less, planning and control, or more vigorous antitrust prosecution and more competition.

Antitrust is, as the historian Richard Hofstadter puts it, "one of the faded passions of American reform"; he holds that we have moved from the age of *The Curse of Bigness* and *Other People's Money* to that of *The Lonely Crowd* and *The Organization Man*. Still, antitrust retains a place in the American *mythos*: Liberals can support it because "they retain their old suspicion of business behavior," and conservatives because they still believe in competition, and may hope to gain "an additional point of leverage in the battle against inflation." The broad public accepts and even likes bigness (in an age of television, mass communications, and anonymity, it apparently prefers big corporations whose names it can recognize). Periodically, however, a story breaks—such as the electrical price-fixing case—that reawakens public distrust of big-business behavior, and regenerates support for antitrust action. Even business itself accords to the principle of antitrust "a certain grudging acceptance," for, as Hofstadter observes:

Visitations by the Department of Justice are a nuisance, lawsuits are expensive, and prosecution carries an unpleasant stigma, but the antitrust procedures can be considered an alternative to more obtrusive regulation such as outright controls on prices. At any rate, big business has never found it necessary or expedient to launch a public campaign against antitrust enforcement; the pieties at stake are too deep to risk touching.¹⁵

¹⁴ *Interlocks in Corporate Management: A Staff Report to the Antitrust Subcommittee of the Committee on the Judiciary, House of Representatives*, 89th Congress, 1st Session, March 12, 1965, p. 230.

¹⁵ Richard Hofstadter, "What Happened to the Antitrust Movement?" in Cheit, *op. cit.*, p. 150.

Nevertheless, in the specific case, business executives tend to attack the antitrust laws and the antitrust officials, whom they apparently regard as enemies, as self-seeking or envious bureaucrats who operate without adequate controls from policymakers at the highest levels. They also regard the antitrust laws as vague, inconsistent, and generally opposed to the public interest, at least as the laws are administered.

On the other side, antitrust officials often feel that they are desperately and forlornly fighting the good fight against heavy odds, including public apathy and political resistance—or at best ambiguity. They often feel that theirs is a hopeless cause. In fact, antitrust policy does face exceptional uncertainties and confusions in this time of coexistence between a competitive society and an organizational society. In the spring of 1965 the chief of the Justice Department's Antitrust Division was reported by *Business Week* to be thinking of resigning because he felt caught between President Johnson's "be-kind-to-businessmen philosophy and the demands of old-line antitrusters for prosecution-as-usual."

The complex task of reconciling these opposing tugs toward a competitive economy and an organized one has been with us for a long time. In the 1880's, when Senator Sherman was campaigning for his antitrust act, he declared that "society is now disturbed by forces never felt before." If Congress refused to act, he warned, there would soon be "a trust for every production and a master to fix the price for every necessity of life." But Andrew Carnegie was at the same time declaring that mass production involved heavy fixed charges, and that a chaotic market would wreck huge industries, cause capital to be wasted and depleted, and prevent national industrial development. The days of Adam Smith were dead and gone, said Carnegie, before the American free-enterprise business ideology hardened. James B. Dill (the lawyer who brought Carnegie and J. P. Morgan together, to form the U. S. Steel Corporation) told Lincoln Steffens: "Trusts are natural, inevitable growths out of our social and economic conditions. You cannot stop them by force, with laws. They will sweep down like glaciers upon your police, courts, and States and wash them into flowing rivers. I am clearing the way for them."¹⁶

Politics and business inevitably drew closer as corporations grew in size and scope. Not all liberals saw this as an undesirable trend. In 1912 Herbert Croly (who was soon to found *The New Republic*) depicted

¹⁶ Lincoln Steffens, *Autobiography* (New York, 1931), p. 196.

the career of the great Republican political boss, Mark Hanna, as an effort to fuse business and government interests for the sake of the public welfare. "Of course," said Croly, "as a politician he could not help representing business because business was a part of himself—because business was in his eyes not simply money-making, but the most necessary kind of social labor." Hanna, said Croly, saw no evil in what he was trying to do; rather he sought to keep alive "in his own policy and behavior the traditional association between business and politics, between private and public interest, which was gradually being shattered by the actual and irresistible development of American business and political life." Hanna, in Croly's view, saw the essential harmony between the interests of business and those of the whole community and sought to develop it.

But how could it be done? How could one avoid the danger that the harmonizing of public (that is, State) interests and private business interests would not be done at the expense of the "common people"—the workers and farmers? This, as Croly saw it, had been the central issue in American politics from the beginning—from the classic debates between Alexander Hamilton and Thomas Jefferson. In *The Promise of American Life* Croly had seen Hamilton, the proponent of a strong central government founded on the combination of business and State interests, as his hero and Jefferson, the advocate of a weak central government and of equality for every man, as his villain:

. . . Hamilton's political philosophy was much more clearly thought out than that of Jefferson. He has been accused by his opponents of being the enemy of liberty; whereas in point of fact, he wished, like the Englishman he was, to protect and encourage liberty, just as far as such encouragement was compatible with good order, because he realized that genuine liberty would inevitably issue in fruitful social and economic inequalities. But he also realized that genuine liberty was not merely a matter of a constitutional declaration of rights. It could be protected only by an energetic and clear-sighted central government, and it could be fertilized only by the efficient national organization of American activities. For national organization demands in relation to individuals a certain amount of selection, and a certain classification of these individuals according to their abilities and deserts. It is just this kind or effect of liberty which Jefferson and his followers have always disliked and discouraged. They have been loud in their praise of legally constituted rights; but they have shown an instinctive and implacable distrust of intellectual and moral independence, and have always sought to suppress it in favor of intellectual and moral conformity.¹⁷

¹⁷ Herbert Croly, *The Promise of American Life* (New York, 1963), p. 44.

Did the American business community take a wrong turn when it accepted the Jeffersonian creed—which was transmogrified into the American free-enterprise business ideology, with its strong antigovernment bias, its commitment to laissez faire, its emphasis upon “rugged individualism”? Were these not doctrines that have become more and more inappropriate, not only to the efficient operation of the economic system, but to the liberty of the individual in an age of industrialism?

And does not the new social-responsibilities creed represent a return to Hamiltonian principles, in accordance with which the business community may seek to use its power (and intelligence) consciously to serve the public interest? American business leaders are coming again to the logic of the prophetic Virginia statesman Benjamin Watkins Leigh, who, more than a century ago, warned that “power and property may be separated for a time by force or fraud—but divorced, never. For so soon as the pang of separation is felt . . . property will purchase power, or power will take over property. And either way, there must be an end to free government.”¹⁸

IV

But society is far more complex today than it was a century ago, and there is no longer a simple dualism between power (meaning political authority) and property (meaning business interests). The concept of property has itself been drastically modified by the rise of the great corporation, and the wide diffusion of ownership and control of the means of production, both through financial institutions and through the political process. Many institutions and groups, including labor unions, farm organizations, religious bodies, racial and religious groups, the press, scientists and intellectuals, as well as political parties and their leaders, possess power to influence the course of American life. The business corporation does not stand astride the American society, as in a *Krokodil* cartoon.

Yet business does have power and a crucial role to play in the polity—if it only will. There are indeed some who see the need for business to play a more constructive role in helping to shape the future

¹⁸ *Proceedings and Debates of the Virginia State Convention*, p. 156; cited by Arthur M. Schlesinger, Jr., *The Age of Jackson* (New York, 1946), p. 13.

American economy and society as absolutely imperative if we are to cope with the problems of maintaining free and healthy social and political institutions. For instance, Professor Kenneth Boulding writes:

The most important current problem facing the United States economy is also a very old problem. This is the continued "cold war" between business and government, with organized labor and agriculture running interference for both, and increasing the noise level. This is something, of course, which has been going on since about 1880, but I think we have now got to the point where the failure to come to some kind of resolution of this ancient conflict is our most serious handicap, as it prevents the rational use of government power for the guidance of the economy and equally wastes the energy which business puts into it.¹⁹

Professor Boulding puts the heaviest blame for this ancient conflict upon the business leadership of the country, which, he charges, has been "politically naïve and obscurantist."

It has failed to offer constructive criticism, which is desperately needed, of the impact of government on the economy. It has been almost as ideological in its own way as the Communists. It has failed to maintain adequate contacts with the intellectual community; and it has retreated into a closed subculture of its own. To some extent this can be explained by the trauma of the great depression, but it is surely time now to throw off the burden of this memory and to develop a business leadership which is capable of a realistic appraisal of its political and social environment.²⁰

In my opinion, there is a great deal of truth in Professor Boulding's indictment, but I think the indictment is far too broad. There are clear signs that more and more business leaders are now doing precisely what Professor Boulding suggests—constructively criticizing government and at the same time joining with government in efforts to spur economic growth, reduce unemployment and poverty, support education, reduce racial discrimination and hostility, protect the country's international payments position, and offer its help on many other matters. More business leaders are seeking to establish better and closer contacts with the intellectual community and to rid themselves of antiquated ideology in an effort to come to grips with the realities of life in the twentieth century.

There is, however, a long way to go before one can be satisfied that the majority of the nation's business leadership is prepared to cope with the extremely difficult tasks involved in reconciling corporate

¹⁹ Letter of Kenneth E. Boulding to Leonard S. Silk, Dec. 11, 1964.

²⁰ *Ibid.*

autonomy and efficiency with public interests and needs. These are problems that face all modern societies, for, as Professor Hoover has taught us, the experience of all industrialized societies demonstrates that some sort of new “mix” of the responsibilities and functions of the State, of economic organizations, and of individuals essentially different from that of capitalism of the past is inevitable. We observe these shifting combinations, whether we look at Great Britain, France, Sweden, the Netherlands, Yugoslavia, the Soviet Union, or our own country. But such an examination also reveals, as Hoover emphasizes, that if the role of the State becomes all-embracing in carrying out these functions and responsibilities, it is likely to prove almost impossible to preserve democratic control of the State and to provide adequate protection for the individual against men wielding state power.

One may hope that the dangers of excessive state power may be avoided if our major institutions, including business corporations and labor unions, behave intelligently and responsibly—and without sacrifice of their independence—to serve the common ends of society.

Every Western democracy is striving to discover for itself the means of achieving a better balance between private and public responsibilities in order to solve key problems. There are parallels between, say, the President’s Labor-Management Advisory Committee in the United States—which has concerned itself not only with collective bargaining but also with achieving faster growth, reducing unemployment, coping with the problems of automation, and making U. S. goods more competitive in world markets—and the National Economic Development Council in Britain or the Economic and Social Council in France. Such similarities are less a case of imitation than of like responses to like problems.

Just as important as such similarities are the differences between countries, affecting their styles and techniques of planning and control and their degrees of economic freedom. The United States government does not have its hands on major nationalized industries, as do the French, the British, and the “free-enterprising” Germans. The United States lacks the European cartel tradition; instead, as the British economist Christopher Saunders puts it, “You folks have the Antitrust Division standing by to put the pitchfork into businessmen if they smile at each other in a friendly way,” although, as I have noted above, antitrust policy has its ambiguities today.

Our government lacks the control of capital markets held by the

French and Germans, and, being a much smaller source of capital for investment, it is not in the same position to "guide" business investment decisions. Geographically and industrially, the United States is much bigger and more complex, its decision centers are more diffused, and its traditions of aggressive competition are more intense—even without the spur of antitrust. Oligopolistic competition need not be gentle, and often is not.

Our historic attitudes toward government differ: just as the British industrialist is less likely than the French to run to government for guidance, so the American businessman is less likely to do so than the Briton. A veteran London newsman relates that big businessmen in Britain mind their P's and Q's with the government in the hope of getting on the Queen's honors list—or simply because it is "the thing to do." American industrialists who now have had extensive experiences from operating in foreign countries know full well that, despite the growth in the role of government in this country, here industry is, as one of them put it, "less fettered than in any other country by a long, long shot." This, they believe, is a major reason why our industry is so strong and innovative; our industrial success appears closely related to "the speed of the decision process," as Thomas Watson, Jr., puts it. The willingness of private business to assume social responsibilities is, in Watson's view and that of many other business leaders, a way to retain their present degree of freedom and to avoid what they fear will be inefficient controls.

This position is founded on a belief that American business today is facing a choice as to the role it shall play vis-à-vis the broad society—a choice that it cannot avoid, because the modern corporation has become the towering institution of Western industrial society, and the problems of the society have become its problems as well. The political forces within the democracy are imposing demands that certain national objectives be achieved—among them maximum employment, racial equality, higher living standards for the poor, improved education, a healthier urban environment, the safeguarding of natural resources, and of course national security.

To achieve such objectives, which involve overlapping business and government functions and responsibilities, there appears to be a fundamental choice between two approaches: increasing the role of government and making greater use of coercion to induce the desired business behavior or developing a greater degree of voluntary co-

operation between business and government. There are obvious dangers in either approach. The first may result in excessive centralization of power in the hands of government, posing genuine threats both to the freedom and efficiency of business, and to the society itself. The second may be too loose and uncertain, and may come to grief on the problems of what sanctions or police power should be exerted against those "chiselers" or simply hard-pressed businesses which are not able to measure up to the standards of "social responsibility" assumed by large and prosperous corporations.

Many conservative businessmen, however, still feel that the choice between government coercion and voluntary co-operation of business with government is no choice at all—or rather a choice between the noose and the gas chamber. "In my judgment," declared George Champion, chairman of the Chase Manhattan Bank, "the new trend toward government-by-guideline is one of the most insidious and dangerous on the national scene today, and one which businessmen should work to reverse with all the energy and dedication they can muster. The guideline approach represents a giant step away from self-reliance and personal responsibility, and toward Federal domination of our national economy."²¹

The end of this ideological struggle within the business community is not in sight. But the disparity between the traditional business ideology and actual contemporary corporate practice in response to economic, political, and social pressures is becoming more obvious. The majority of business leaders, it seems to me, are recognizing that a new partnership with government is being forced upon them and that they must, as practical men, find ways of adjusting to this new relationship with minimum damage to their own interests and freedom of action.

²¹ "Government-by-Guideline: A New Threat to Economic Freedom," address by George Champion, chairman of the Board, The Chase Manhattan Bank, before Illinois Bankers Association in Chicago, May 25, 1965; reprinted by The Chase Manhattan Bank.

Juanita M. Kreps* and Clifton H. Kreps, Jr.**
*The Pursuit of Full Employment****

I. *Introduction*

Few ills have plagued the American economy with the stubborn persistence of unemployment. Without going back to the economic collapse of the 1930's, today's student finds ample evidence of the slack, the lagging growth rate, the underutilization—whatever current term is popularly used—which in human resource terms spells unemployment. The record clearly shows, moreover, that throughout the postwar era a significant proportion of the labor force has remained idle even during the prosperous years, with the percentage unemployed increasing further still in recession years and, once the recession ends, declining somewhat but not to the level held in the previous period of prosperity. Gross national product has continued to rise and so, too, have wages and prices.

Downward adjustments in prices and wage rates, postulated by earlier economists as the eventual result of unemployment, have of course not occurred. The failure of sustained prosperity to eliminate unemployment challenges also some of the precepts of present-day economists. For although we concluded from the depressed thirties that an economy could limp along indefinitely at less than full employment, we are not quite prepared to explain this phenomenon in the soaring sixties.

But economists are a resilient lot. If prosperity does not create enough jobs, we reason that we then do not have enough prosperity. If a \$600 billion GNP does not produce full employment, a \$650 billion GNP will. Or a \$700 billion one. The trick is to raise the growth rate, which will increase the output of goods and services and the aggregate demand for labor. The higher the growth rate, the greater the demand

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*** This paper was completed in February, 1965.

for labor. Drawing on the fiscal lesson learned in an earlier era, we reason that proper taxation and spending procedures, combined with the right kind of monetary policy, will induce the necessary demand for goods, and hence for labor.

Rumblings of discontent with this aggregate-demand approach have been heard in recent years. The aggregate-demand theorists, although well in the majority, have been repeatedly challenged by the argument that the pace of technology and the rapidly changing size and age distribution of the labor force are creating structural unemployment problems with which fiscal and monetary measures cannot deal successfully. A general increase in the economy's total spending has little effect on job opportunities for displaced workers with low levels of education, skill, and geographical mobility. By contrast, the pressure of demand for the limited supply of highly trained personnel merely creates bottlenecks which lead to price, not employment, increases. To cope with unemployment in the present era a new approach is required, and this approach must be directed toward improving labor force quality.

The Great Debate between the aggregate demand theorists and the structuralists, which raged throughout the 1963-1964 Hearings of the Senate Subcommittee on Employment and Manpower,¹ revealed more points of agreement than disagreement. But emerging from the debate were some key questions which bear closer scrutiny if the goal of full employment is to be taken seriously. The first is that of the goal itself: Is the unemployment aim 4 per cent or 3 per cent? The objective chosen affects both the nature and the priority of policy measures. A second question has to do with the time period involved in reaching the desired employment level. Achieving 4 per cent unemployment by 1970 would, of course, require less increase in the growth rate than would be required to reach this goal in 1966.

There is also the question of the constraints (real or imagined) imposed by the threat of accompanying inflation, which in addition to creating domestic difficulties could also lead to a worsening of the American balance-of-payments problem. It is theoretically possible to achieve a 3 per cent unemployment rate without price rises; but whether we would actually avoid inflation is partly dependent on the

¹ *Nation's Manpower Revolution, Hearings before the Subcommittee on Employment and Manpower of the Committee on Labor and Public Welfare, United States Senate, 88th Congress, 1st sess.* (Ten parts; Washington: Government Printing Office, 1963 and 1964). Cited hereafter as *Nation's Manpower Revolution*.

kinds of policy instruments invoked. The likelihood of some upward movement of prices, particularly if the unemployment rate were substantially lowered, poses again the question of how much inflation we are willing to accept as the cost of, say, a 1 per cent reduction in unemployment. Or, conversely, what level of unemployment is required to maintain price stability?

Finally, there are questions of long-run significance to both the growth rate and the institutional arrangements which apportion in-

Table 1. *Growth and Unemployment Rates, United States, 1946-1964 (per cent)*

<i>year</i>	<i>growth rate</i>	<i>unemployment rate</i>	<i>year</i>	<i>growth rate</i>	<i>unemployment rate</i>
1946	-10.0	3.9	1956	2.1	4.2
1947	- 0.1	3.9	1957	1.8	4.3
1948	3.8	3.8	1958	- 2.3	6.8
1949	- 0.1	5.9	1959	7.0	5.5
1950	8.7	5.3	1960	2.6	5.6
1951	7.4	3.3	1961	1.9	6.7
1952	3.4	3.1	1962	6.3	5.6
1953	4.4	2.9	1963	3.4	5.7
1954	- 1.6	5.6	1964	5.0	5.3
1955	8.1	4.4			

Sources: Growth rates; 1946-1959, Committee for Economic Development; 1960-1963, computed from constant-dollar GNP data in *Economic Indicators*, Dec., 1964, p. 2; 1964, estimated. Unemployment rates: 1946-1961, 1962 Supplement to *Economic Indicators*, p. 34; 1962-1963, *Economic Indicators*, Dec., 1964, p. 10; 1964, estimated.

come and leisure. Current expenditures which stimulate demand may also improve growth rates in future years, and there is now evidence that investment in education and training can compete with that in physical capital on the basis of potential future improvements in the rate of economic growth. To the extent that non-working time now taken in the form of unemployment, forced early retirement, etc., is channeled instead into education and training, the economy's long-run as well as its short-run growth rates will be affected.

II. *Growth Rates and Unemployment Rates*

The American economy's unhappy postwar growth rate and unemployment rate experiences are shown in Table 1.

1. Unemployment: How Low Is Low?

Although we attained high growth rates in some years of recovery from recession, such as 1950 and 1951, 1955, 1959, and 1962, in only one instance have real growth rates been of such level and duration as to bring the unemployment rate down to 3 per cent. That period was 1950-1953, during the last year of which the rate fell to 2.9 per cent. But the 1953-1954 recession followed, and since then unemployment has not fallen to the 4 per cent level. Recognizing the difficulties of achieving full employment, the Kennedy Administration in 1961 designated a 4 per cent unemployment rate as an "interim" goal.

Table 2. Average Annual Real Growth Rates and Changes in Unemployment Rates, 1948-1964 (per cent)

period	average annual real growth rate	total change in unemployment rate	average change in unemployment rate
1948-1953	4.5	- .9	-.18
1953-1957	3.0	+1.4	+.35
1957-1960	2.3	+1.3	+.43
1960-1964	3.8	- .3	-.06
1962-1964	4.9	-1.3	-.47

Source: Computed from data of Table 1. Professor Eckstein's prepared statement in *Nation's Manpower Revolution* (see n. 3, p. 109) contains a similar table for years through 1962. His figures differ slightly from those shown above; he apparently used quarterly GNP data and monthly unemployment data.

This goal has continued to elude us, despite a long period of economic expansion. The maximum "tolerable" level of unemployment would appear to be 4 per cent, therefore, except for the strong position taken by the Senate Subcommittee on Employment and Manpower in 1964:

We are agreed that 4 per cent is an excessively high rate of unemployment as a long run goal. The free nations of Western Europe and Japan have demonstrated that predominantly free enterprise economies can, through appropriate policies, maintain unemployment levels even below 2 per cent of the labor force without unmanageable inflationary pressures.²

Throughout its 1962, 1963, and 1964 annual reports the Council of Economic Advisers referred to the 4 per cent rate as an interim objective, indicating a hope of later achieving some lower rate. Despite

² *Ibid.*, p. 29.

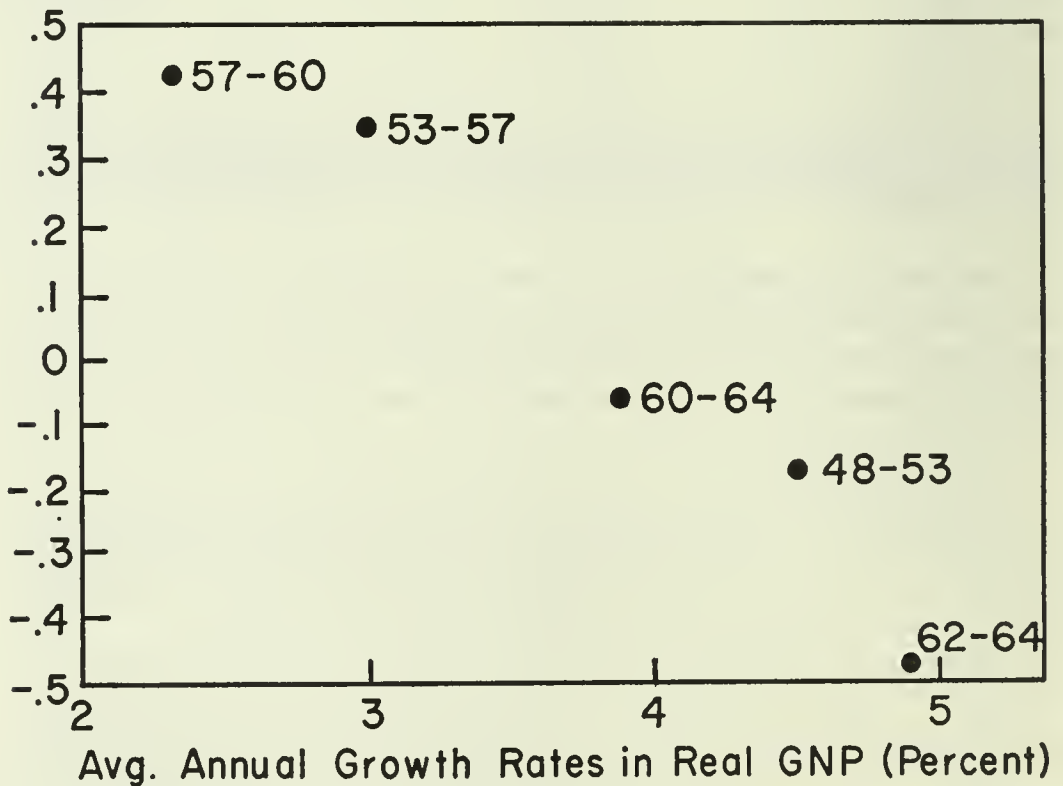
the obvious problems inherent in pushing the rate to 3 per cent within any short period of time, the long-run goal of 3 per cent needs to be kept in mind. In the analysis of growth rates and unemployment rates which follows, the 3 per cent objective is therefore considered along with the interim goal.

2. *Growth: How High Is High?*

The inverse relationship between postwar growth and unemployment rates is demonstrated in Table 2 and Figure 1. On the basis of a detailed study of this relationship for the 1948-1962 period, the Council of Economic Advisers concluded that an annual real growth

Figure 1. *Average Annual Growth Rates and Changes in Unemployment Rates, 1948-1964*

**Average Annual Change
in Unemployment Rates
(Percent)**



Source: Table 2.

rate of 3.5 per cent is required in the American economy merely to hold unemployment constant. To reduce it, higher growth rates than this are required; specifically, an additional 3.3 per cent real growth rate increase reduces the unemployment rate by 1 percentage point.³

The Council formula, based on 1948–1962 data, has fitted the economy's 1963–1964 operating results extremely well, as Figure 1 reveals. On the basis of this observed goodness of fit, the initial assumption is made that the formula will continue to prove reliable during the remaining six years of the decade.

In early 1965 estimates of the year's GNP are ranging from an "optimistic" \$660 billion to a "pessimistic" \$650 billion.⁴ On the basis of the optimistic view and then the pessimistic one, estimates are made of the growth rates in real GNP required during 1966–1970 to achieve (1) the interim full employment objective of a 4 per cent unemployment rate, and (2) the ultimate objective of a 3 per cent unemployment rate, both over periods of 1, 2, 3, 4, and 5 years from 1965. The two sets of rates lead, via different routes, to the same interim-goal and ultimate-goal levels of real GNP. These levels are shown in Table 3, together with the real GNP levels associated with merely maintaining the 5.5 per cent and 5 per cent unemployment rates implied by the pessimistic and optimistic projections of 1965 current-dollar GNP.⁵

The estimated growth rates are shown in Table 4, which reveals that the rates based on the \$650 billion 1965 GNP projection are substantially higher than those based on the \$660 billion projection. But even the lower set of rates is high enough. Assuming they apply, the ultimate

³ The Council discussed the bases for this estimate at some length in both its 1962 and 1963 *Annual Reports*. See also: "Prepared Statement of Walter A. Heller, Chairman, Council of Economic Advisers," in *Nation's Manpower Revolution*, pp. 1751–1769, esp. p. 1754; "Unemployment and Economic Growth," prepared statement of Otto A. Eckstein, *ibid.*, pp. 1406–1413, esp. p. 1409; and Authur M. Okun, "Potential GNP: Its Measure and Significance," *Proceedings of the Business and Economic Statistics Section, American Statistical Association, 1962* (reprinted as Cowles Foundation Paper No. 190).

⁴ See, for example, *The Morgan Guaranty Survey*, Dec., 1964, pp. 2–3; *Business Week*, Jan. 2, 1965, pp. 11–13; and National Industrial Conference Board, *Business Outlook 1965* ("Studies in Business Economics," No. 86 [New York, 1964]).

⁵ The optimistic \$660 billion GNP estimate for 1965 represents a growth in current dollar terms over 1964 of \$37 billion, or 5.9 per cent. In real terms, assuming a continuation of 1964's same rate of slow but steady upward price drift, the increase is about 4.2 per cent, a rate of real growth sufficient (by the Council formula) to reduce unemployment from its 1964 level of 5.3 per cent down to just about an even 5 per cent.

The pessimistic estimate of \$650 billion represents a current dollar growth of but \$27 billion over 1964, or 4.5 per cent. Again assuming 1964's rate of price updrift, the real increase is 2.8 per cent. This is .7 per cent below the "standstill" growth rate for unemployment, and should tend to raise unemployment by about .2 per cent, to 5.5 per cent.

Table 3. *Levels of Real GNP Associated with Selected Unemployment Rates, over Periods of 1, 2, 3, 4, and 5 Years from 1965*

years in period from 1965	levels of real GNP (billions of 1965 dollars) required to			
	maintain unemployment rates of		achieve unemployment rates of	
	5.5% *	5%†	4%	3%
1—1966	673	683	705	727
2—1967	696	707	730	754
3—1968	721	732	757	781
4—1969	746	757	784	808
5—1970	772	783	811	837

* Assumes year-end 1965 GNP of \$650 billion.

† Assumes year-end 1965 GNP of \$660 billion.

full employment objective of a 3 per cent unemployment rate can be achieved before the end of 1970 if the economy maintains an average 5 per cent real growth rate over the remainder of the decade.

The historical record of America's postwar economic growth, as shown earlier in Table 1, heavily underscores the formidable nature of this stipulation. We have never succeeded in holding the growth rate so high for so long. Furthermore, even if we do succeed in maintaining a 5 per cent growth rate through 1970, the 3 per cent unemployment objective does not automatically follow. The growth rate-unemployment rate relationship developed by the Council of Economic Advisers,

Table 4. *Real Economic Growth Rates Required to Yield 4 Per Cent and 3 Per Cent Unemployment Rates, on \$660 Billion and \$650 Billion GNP Assumptions*

years in period from 1965	rates of real economic growth over period if end-of-period unemployment rate is			
	4 per cent		3 per cent	
	1965 GNP of \$660 billion	1965 GNP of \$650 billion	1965 GNP of \$660 billion	1965 GNP of \$650 billion
1—1966	6.8	8.5	10.1	11.8
2—1967	5.2	6.0	6.8	7.7
3—1968	4.6	5.2	5.7	6.3
4—1969	4.3	4.8	5.2	5.6
5—1970	4.2	4.5	4.8	5.2

on which we have relied in estimating the growth rate requirement for full employment by 1970, ignores the possible barrier mentioned earlier, that of structural unemployment. Also, there is the question of the behavior of the price level. Will it rise under the stress of a continuous 5 per cent real growth rate? If so, by how much? And how much inflation are we prepared to accept as the price of achieving full employment?

Finally, assuming that a continued 5 per cent real growth rate will produce full employment by 1970, and that we are willing to pay whatever inflationary price such a growth rate might carry with it, the question of how to achieve this growth rate still confronts us.

Thus, what is past is only prologue, and all these questions remain to be dealt with. They will be discussed in the order indicated: first, structural unemployment; second, possible price inflation (and the related balance of payments problem); and third, economic policy requirements for full employment.

III. Structural Unemployment, Price Inflation, and Economic Policy Requirements

1. Structural Unemployment

Structural unemployment results from a condition of labor market imbalance. The skill mix and geographic distribution of the unemployed do not match the skill requirements and geographic location of the job opportunities available.

Where such conditions exist, unemployment would also exist even if the economy succeeded in meeting the "ideal" criterion of full employment first suggested by Lord Beveridge and later adopted by the Commission on Money and Credit⁶—that the number of job opportunities should equal the number of unemployed. The Commission recognized this possibility, and went on to say:

In those circumstances there would still be unemployment and there would also be unfilled vacancies. But both conditions could be relieved by measures to improve the functioning of labor markets and to increase the mobility of workers geographically and among jobs of different skills. . . .⁷

⁶ See *Money and Credit: Their Influence on Jobs, Prices, and Growth* (Englewood Cliffs, N. J., 1961), p. 28.

⁷ *Ibid.*

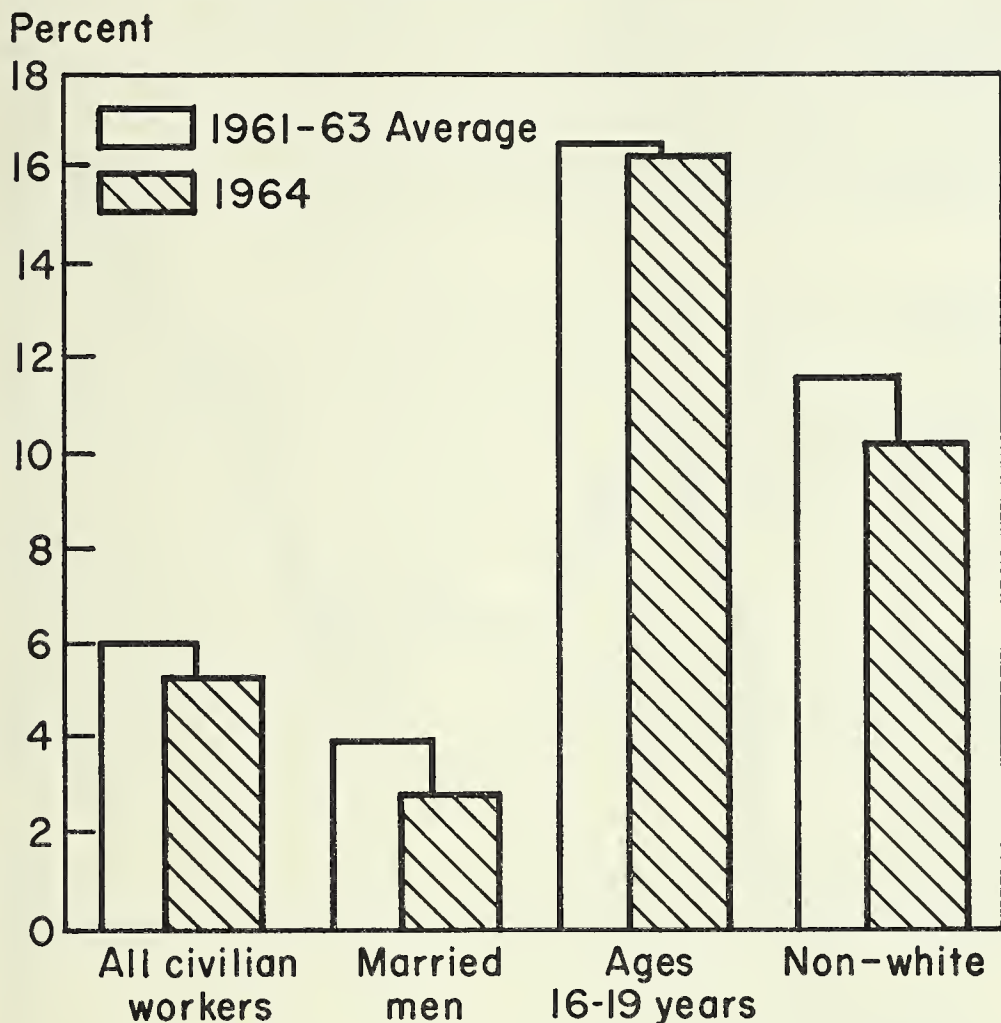
This is indeed the prescription for dealing with the problem, and it has both a short-run and a long-run dimension. Short-run measures come under the heading of manpower policy—training of new labor force entrants who lack required job skills, retraining of technologically displaced workers, and improvement in the geographic mobility of the unemployed. Long-run policies are those which may collectively be designated as investments in human capital. The principal objective of such investment is to raise the educational level of the labor force so that over time its capabilities will match the higher skill requirements evolving from technological advance. A desirable side effect of this improvement in the educational level is a substantial increase in occupational mobility, which helps to ease the job transfer problem arising from the technological displacement of workers.

Both manpower policy and its longer-run counterpart, investments in human capital, attack unemployment from the supply side of the labor market by altering the qualitative composition of the labor force. In contrast, more conventional aggregate-demand-increasing policies operate on the demand side of the market, by increasing the total number of job opportunities. To the extent that unemployment is structural, it should clearly be attacked qualitatively. Attacking it only quantitatively, by increasing aggregate demand for goods and hence for labor, fails to dissolve structural unemployment, and in addition, by worsening the already existing mismatch between available jobs and available workers, may lead to labor-cost induced price inflation.

The crucial question is: To what extent is our unemployment problem structural, and thus non-responsive to the conventional aggregate-demand-increasing attack? Or, stated another way, as the unemployment rate falls in response to increasing aggregate demand induced by continued high economic growth, at what point does the structural problem begin to constitute a barrier and thus cause continued increases in aggregate demand to lead in the direction of labor-cost induced price inflation rather than in the desired direction of lower levels of unemployment?

Certainly, indications of structural unemployment are evident in the form of differential unemployment rates by age, race, and educational attainment. On the other hand, there are sharp increases in the number of job openings without commensurate reductions in unemployment. Figures 2a and 2b and Table 5 summarize some of this evi-

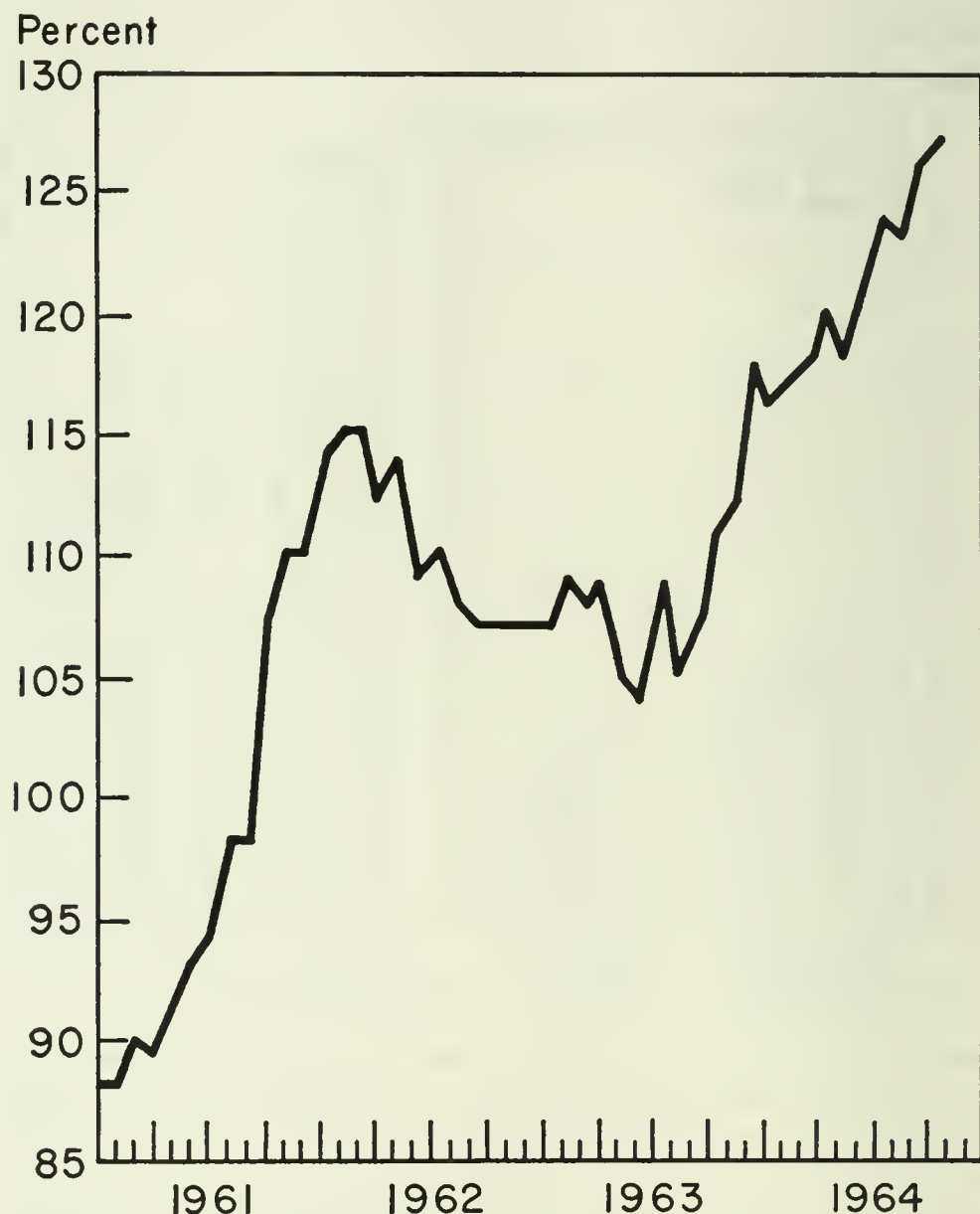
Figure 2a. *Unemployment Rates (per cent)*



dence. Different observers interpret these data differently, however. In commenting on the evidence in Table 5, Professor Charles Killingsworth, a leading proponent of the structuralist point of view, concluded that

long before we could get down to an overall unemployment rate as low as 4 per cent, we would have a severe shortage of workers at the top of the educational ladder. This shortage would be a bottleneck to further expansion of employment. I cannot pinpoint the level at which the bottleneck would begin to seriously impede expansion; but, on the basis of the relationships revealed by [the] table . . . , it seems reasonable to believe that we could not get very far below a 5-per cent overall unemployment level without hitting that bottleneck.⁸

⁸ "Automation, Jobs, and Manpower," statement by Charles C. Killingsworth, in *Nation's Manpower Revolution*, part 5, pp. 1461-1483, esp. p. 1479.

Figure 2b. *Help-Wanted Advertising Index* (1957-1959 = 100)

Source: Federal Reserve Bank of New York.

On the other hand, the Council of Economic Advisers has not been similarly impressed. In its 1963 *Annual Report* and in its prepared statement before the Senate Subcommittee on Labor and Manpower, defending the feasibility of the 1964 tax cut, the Council gave primary emphasis to the role of aggregate demand:

Important as is the attack on structural problems, we need not fear that structural obstacles will block a healthy expansion of jobs and output resulting from the tax cut. The feasibility of our 4-per cent interim target assumes not some newly perfected system of labor market adjustment but the labor market as it exists today with its present adjustment mechanism. Possible and desirable improvements in our labor market adjustment processes can smooth and accelerate achievement of the interim target. And they can permit us to penetrate beyond it to even lower unemployment rates. But it is on demand stimulus that we must rely to get to the provisional 4-per cent objective.⁹

These differences in emphasis persist, although neither school of thought denies the need for action on both fronts. Moreover, it should be noted that public expenditures to restructure the labor force also increase aggregate demand to the extent that they are deficit-financed. This is admittedly not their primary purpose, but the demand stimulus is there all the same, and it carries a higher multiplier effect than an equal amount of deficit-financed tax cutting, since no saving occurs in the initial round of expenditure.

Both the structural unemployment problem and the problem of bolstering the growth rate to reduce unemployment, therefore, can be approached simultaneously through the use of the same device—deficit-financed public expenditures aimed at restructuring the labor force.

⁹ *Nation's Manpower Revolution*, part 5, p. 1769.

Table 5. *Actual and Relative Unemployment Rates by Educational Attainment, April, 1950, March, 1957, and March, 1962 (males, 18 and over)*

years of school completed	unemployment rates					
	actual percentages			relative *		
	1950	1957	1962	1950	1957	1962
0 to 7	8.4	6.9	9.2	154	203	170
8	6.6	4.4	7.5	108	110	132
9 to 11	6.9	4.7	7.3	115	120	142
12	4.6	3.0	4.8	70	67	75
13 to 15	4.1	2.7	4.0	64	64	65
16 or more	2.2	.6	1.4	34	14	21
all groups	6.2	4.1	6.0	—	—	—

* The relative unemployment rate is the ratio between the percentage unemployment rate for a given educational attainment group and the percentage unemployment rate for all other groups at the same point in time.

Source: *Nation's Manpower Revolution*, part 5, p. 1479.

Admittedly, there is a limit to the amount that can be spent in any short period of time through manpower policy action. If we emulate the example of Sweden and aim ultimately to retrain 1 per cent of the labor force each year, we shall be dealing by 1970 with fewer than 1 million workers annually. At an assumed retraining cost of \$2,000 per worker that would be less than \$2 billion. As will be demonstrated below, however, even abstracting from price level effects, public deficit financing to sustain a 5 per cent real growth rate over the 1966-1970 period is likely to involve sums seven to nine times that amount.

However, there is no such annual limit to the amount that can be spent on manpower policies' longer run counterpart—investments in human capital, through expanded federal outlays on health and education. The only limit here is willingness to spend, which may be increased by the knowledge that the expenditures are serving a double purpose. In the short run they increase the growth rate and thus reduce unemployment; in both the short and the longer run they help dissolve the structural unemployment barrier to achieving full employment.

Nor need our willingness to spend be weakened by the prospect of an end to further annual federal tax cuts. It has been estimated that some combination of federal tax cuts and/or expenditure increases on the order of \$6 billion would have been required in 1965 merely to offset the annual growth in federal tax receipts resulting from the annual rise in gross national product. Using 1964 tax rate levels and the real GNP projections of Table 3, it may be inferred that, even without allowance for price level advance, these excess tax receipts would amount to about \$7.7 billion by 1970. Annual reductions of at least \$1.3 billion in federal tax revenues, achieved through reducing tax rates, would therefore seem to be required over the period 1965-1970, or else the annual deficits required to sustain a 5 per cent real growth rate will not be large enough. Adjusted for possible price increases over the period, the annual reductions may be substantially larger.

As to the size of the annual deficits, let us make the favorable assumption that, in the face of an essentially neutral (balanced budget) federal fiscal policy, the private sector of the economy can sustain a growth rate in real GNP of 3.5 per cent per year, or just enough to keep unemployment from increasing. Let us assume further that expenditures resulting from federal deficits carry with them a gross multiplier of 3, the same as that used by the Council of Economic Advisers in calculating the effects on real GNP of the 1964 federal tax

cut.¹⁰ Reasoning again from the data of Table 3, Table 6 shows the real federal deficit required each year from 1966 to 1970 to hold the real growth rate at 5 per cent and thus lead to 3 per cent unemployment by 1970.

The estimated deficits range from \$14.7 billion in 1966 to \$18.0 billion in 1970, and at first glance may appear alarmingly high. They are actually conservative estimates, however. First, they do not allow for price-level effects. This adjustment will be made in the following section. Also, they assume that the economy can sustain a 3.5 per cent real growth rate with a completely neutral federal fiscal policy. But the record of the postwar period shows that the economy has not consistently sustained a real growth rate this high even with the assistance of expansionary federal fiscal policy.

Table 6. *Annual Federal Deficits Required to Achieve 5 Per Cent Growth in Real GNP, 1966-1970 (billions of 1965 dollars)*

	(1) real GNP at 5% growth rate *	(2) real GNP at 3.5% growth rate *	(3) GNP at 5% minus GNP at 3.5%	(4) assumed multiplier	(3)/(4) required fed- eral deficit
1966	727	683	44	3	14.7
1967	754	707	47	3	15.7
1968	781	732	49	3	16.3
1969	808	757	51	3	17.0
1970	837	783	54	3	18.0

* Source: Table 3.

To the maximum possible extent, these deficit-financed outlays need to be concentrated on manpower programs. Our aim might well be that set by the Swedish government, so that by 1970 we will be retraining at least 1 per cent of the labor force annually. However, since this goal will use only a fraction of each year's required federal deficit, the major portion of the expenditures should be aimed at the longer run objective of improving educational levels. Expenditures reflecting investment in human capital would therefore assume quite

¹⁰ Actually, the Council assumed that \$10 billion of income tax reduction in 1964 would practically all be spent for consumption purposes and that this increase in consumption spending would induce additional investment spending of about \$5 to \$6 billion. A net multiplier of 2 was then applied to the roughly \$15 billion of additional (consumption plus investment) spending, to yield an estimate of a \$30 billion increase in GNP resulting from the tax cut. The tax cut multiplier itself was thus 30/10, or 3. See *Nation's Manpower Revolution*, pp. 1754-1755.

large proportions. Finally, federal tax rates should be reduced enough each year to eliminate the increase in federal revenues that would otherwise result from the application of the previous year's rates to the current year's larger real GNP. Otherwise, the required deficits could be achieved only by even larger expenditures.

2. *Price Inflation and the Balance of Payments*

Maintaining a 5 per cent real growth rate over the 1966–1970 period and thus promoting full employment by 1970 can be accomplished by the expansionary fiscal policy outlined in the preceding section, provided the effect is not moderated or offset by a restrictive monetary policy aimed at preserving price stability. This means, of course, that an easy monetary policy must prevail, and that whatever degree of price level advance results from the attempt to lower the unemployment rate must be accommodated by the monetary authorities.

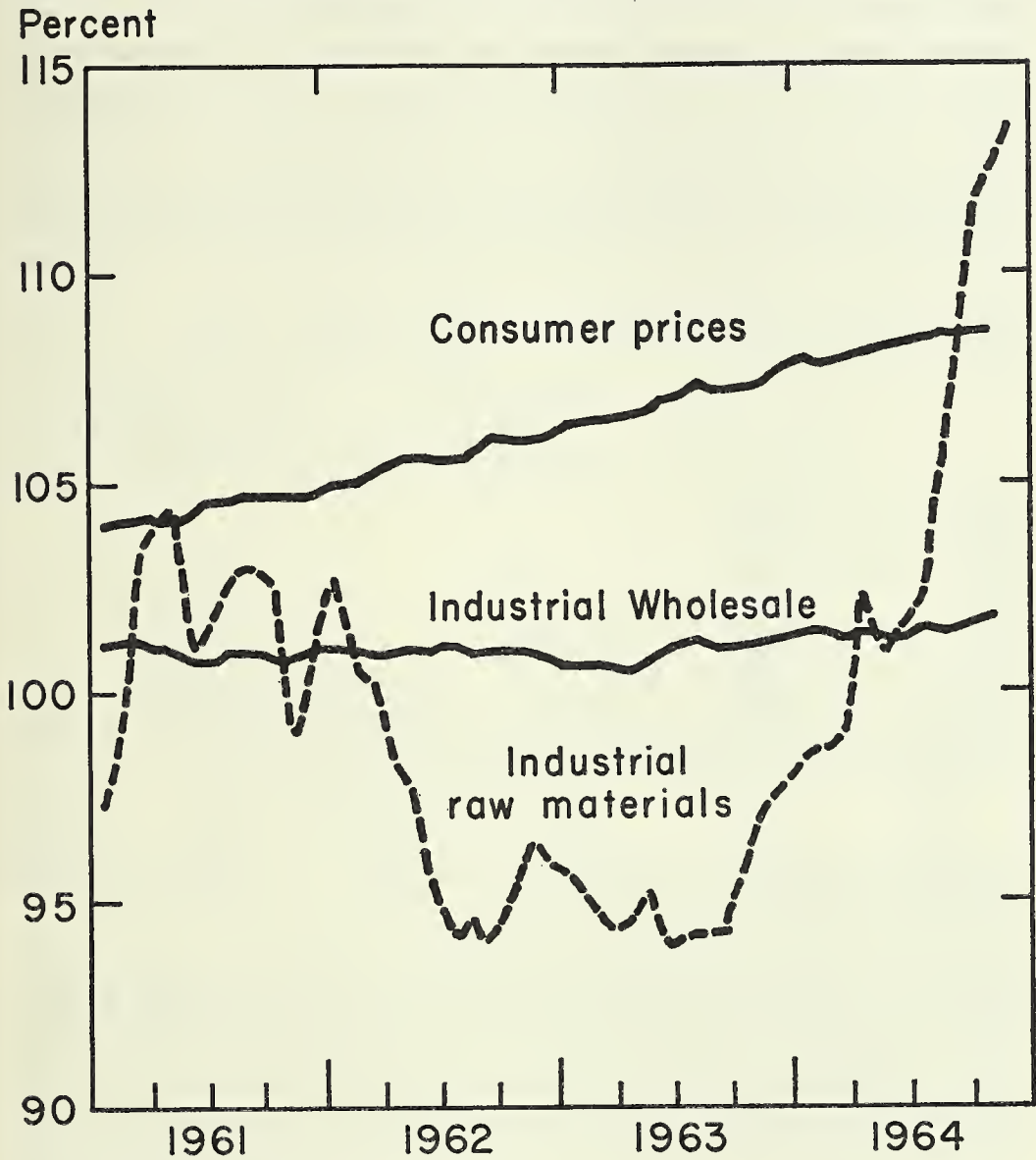
The price level advance itself, generated by a combination of expansionary fiscal and easy monetary policies, constitutes a social cost of full employment. So to regard it, however, immediately suggests three questions: First, what is its possible extent? Second, what adverse effects might it have on the international balance of payments problem? And third, are there means available for offsetting these effects which may be used instead of simply trying to avoid them through restrictive monetary action?

A. *The possible extent of price advance.* Compared with previous postwar periods of economic expansion, that of 1961–1964 was one of price stability. Price behavior over the period is shown in Figure 3. Consumer prices drifted upward only slowly. Wholesale prices maintained an almost constant level. But the prices of industrial raw materials, after declining until late 1963, began a sharp rise then that persisted through 1964 and (though the figure does not show this) on into 1965.

It is axiomatic that the first prices to move upward as a result of inflationary pressures are those of more sensitive commodities and raw materials. Wholesale prices then follow, and finally consumer prices, as the inflationary pressures, if persistent, gradually spread the rise throughout the whole price structure.

The price pattern at the end of 1964 suggests that if the economy maintains its 1964 real growth rate into and beyond 1965, the price

Figure 3. *Price Behavior, 1961-1964 (1957-1959 = 100)*



Source: Federal Reserve Bank of New York.

level may rise considerably more rapidly in 1965-1970 than it did in 1961-1964. The rate of increase may accelerate, moreover, at least until 3 per cent unemployment is achieved. Thereafter, since the real growth rate required to maintain full employment is lower than the rate required to establish it, the pace of price advance may stabilize itself and remain more or less constant.

It has been suggested elsewhere that an annual price rise of about 4.5 per cent per year may accompany the maintenance of a 97 per cent employment rate.¹¹ Let us lean to the conservative side, however, and assume the rate to be 4 per cent per year. If we start with a rate half this high for 1966, and raise it .5 per cent each year, the price rise will reach 4 per cent in the full employment year of 1970. In terms of 1965 prices, Table 7 shows the effect of these assumptions on the price level over 1966-1970. It also shows the height to which the price level may be expected to rise by 1980, should full employment continue to prevail

Table 7. *Price Levels, 1966-1970, and 1980 (1965 = 100)*

	<i>price index</i>	<i>annual increase in price index (per cent)</i>	<i>annual rate of increase in price index (per cent)</i>
1965	100.0		
1966	102.0	2.0	2.0
1967	104.6	2.6	2.5
1968	107.7	3.1	3.0
1969	111.5	3.8	3.5
1970	116.0	4.5	4.0
1980	171.7		(1970-1980) 4.0

average annual increase in price index: 1965-1970—3.3 per cent
 1970-1980—5.5 per cent
 1965-1980—4.7 per cent

during the decade of the seventies, and should it be accompanied by a 4 per cent annual rate of price increase.

Table 8 then adjusts the 5 per cent real-growth-rate GNP levels required to achieve full employment by 1970 and the estimated federal deficits required to achieve them—both shown earlier in Table 6—for these estimated price level effects. From Table 8 it can be seen that, because of an estimated 16 per cent increase in the price level between 1965 and 1970, the estimated federal deficits required annually range, in current-dollar terms, from \$15 billion in 1966 to \$21 billion in 1970. The cumulative current-dollar deficit over the five-year period totals \$89 billion.

These, then, are the estimated domestic costs of achieving full employment (3 per cent unemployment) by 1970—a price level rise of

¹¹ See Paul A. Samuelson and Robert M. Solow, "Analytical Aspects of Anti-Inflation Policy," in *American Economic Review*, L, *Papers and Proceedings* (May, 1960), pp. 177-194, esp. pp. 191-194.

one-sixth and a cumulative federal deficit of approximately \$90 billion. But domestic costs are not the only ones involved. The international aspects—specifically, the impact of a 16 per cent domestic rise over a five-year period on the balance-of-payments situation—must also be considered.

B. *The balance of payments.* The United States has had a balance-of-payments problem since 1958, although it was not recognized as such until late 1960. Actually, our payments position has been in deficit for all but two years (1951 and 1957) since 1949. These earlier deficits, however, served the useful purpose of permitting the rest of the world,

Table 8. *Current-Dollar GNP and Federal Deficits Required for 5 Per Cent Real Annual Growth Rate, 1966–1970*

year	real GNP at 5 per cent growth rate (billions of 1965 dollars)	price index (1965 = 100)	current- dollar GNP at 5 per cent growth rate	federal deficit required to yield annual 5 per cent real growth rate	
				constant (1965) dollars (billions)	current dollars (billions)
1966	727	102.0	746	14.7	15.0
1967	754	104.6	789	15.7	16.4
1968	781	107.7	841	16.3	17.6
1969	808	111.5	901	17.0	19.0
1970	837	116.0	971	18.0	21.0

and especially Europe, to build up war-depleted dollar-transactions balances. By the end of 1957 these were approaching levels considered adequate by their foreign owners, who then began converting “excess” dollars acquired into gold. Thus our gold stock declined by \$2.3 billion in 1958, by an additional \$1.0 billion in 1959, and by a further \$1.7 billion in 1960.

In October, 1960, a sudden outburst of speculative activity in European gold markets caught the attention of the American press and public, served to highlight the existence of the balance-of-payments problem, and led to a number of immediate programs designed to limit the further flow of dollars abroad. These actions included the tying of foreign aid expenditures to domestic procurement, restrictions on spending by overseas military personnel, new limitations on the

amount of duty-free goods that American tourists might bring in from abroad, and an order, later rescinded, calling home dependents of American overseas military forces.

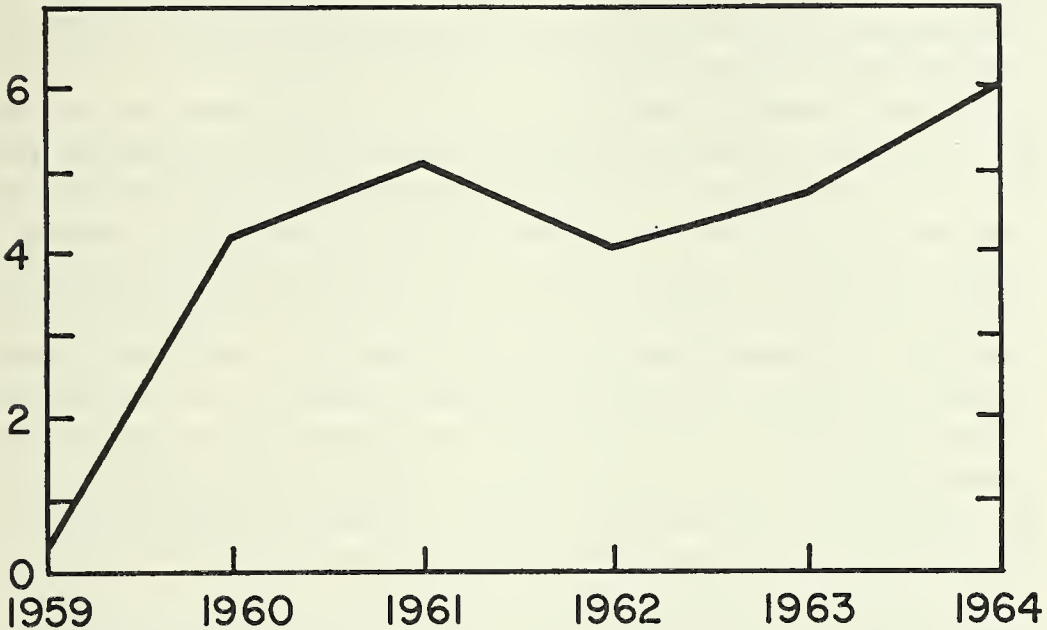
Subsequently additional measures were taken. The combined effect of all these actions plus other developments, discussed below, has been to narrow the payments gap substantially and to diminish the outflow of gold. Nevertheless, the 1964 deficit was still \$2.5 billion and by the end of that year our gold stock had declined by a third from its 1957 level of almost \$23 billion, and approximated \$15.5 billion. For 1965 a continued payments deficit of at least \$1.5 billion is projected and a further substantial gold loss is contemplated.

An interesting aspect of this balance-of-payments problem is its persistence throughout the period of relative price stability in the American economy which followed the 1960–1961 recession. In fact, although some of the recent improvement in our payments position must undoubtedly be ascribed to the Federal Reserve System's "Operation Twist" and foreign-currency operations, and to the interest-equalization tax proposed in July, 1963, and finally passed in September, 1964, the bulk of it seems to have come because the rest of the world has inflated faster than we have. Continued rapid economic growth in many countries, especially in Europe, has stimulated foreign demands for our goods; and price increases abroad, combined with virtual price stability here, have improved the price competitiveness of our products. Thus our trade position has improved rapidly since 1959, though it has not yet reached the point of offsetting the dollar outflows resulting from capital exports and federal government outlays abroad. Figure 4 shows the improvement in the American balance of trade; Table 9 shows the differential international price behavior that contributed to it.

Our price level performance was not without cost. The reasoning of the preceding section suggests that it was no accident that all the countries listed in Table 9 as having higher rates of price increase during 1959–1964 also had significantly lower unemployment rates. But it must also be conceded that the rate of price rise—16 per cent, or over twice that of 1959–1964—which our calculations suggest might accompany a public economic policy aimed at achieving a 3 per cent unemployment rate by 1970, would undoubtedly have seriously adverse effects on our balance-of-payments situation. At best, more than doubling the rate of price increase would diminish the chances for

Figure 4. *Balance of Trade, United States, 1959-1964*

Billions of
Dollars of Surplus



Source: International Monetary Fund.

continuing balance-of-payments improvement; at worst, it might cause marked balance-of-payments deterioration. But short of preventing the price rise through restrictive measures of monetary policy, which would undermine the full-employment goal, what measures are available?

C. *International inflation offsets.* A range of possibilities can be suggested. Some of these—such as the multilateral creation of an international system of floating exchange rates, or a new international

Table 9. *Increases in Consumer Prices in Selected Industrial Countries, 1959-1964*

	<i>per cent increase</i>		<i>per cent increase</i>
Japan	34	United Kingdom	15
Italy	26	West Germany	13
France	23	United States	7

Source: International Monetary Fund.

reserve currency unit—would operate either automatically to eliminate the balance-of-payments deficits (floating exchange rates) or else to eliminate their significance in gold-outflow terms (international reserve currency unit). But these are too long-range in character to warrant extended discussion here, since our concern is with inflation over the next five years.

Similarly, assuming continuation of the present fixed-exchange-rate, gold-bullion-standard set of international monetary arrangements over the next five years, let us also rule dollar devaluation out of consideration, on the grounds that it might only lead to competitive exchange depreciation and would in any event be politically inexpedient. Finally, no account will be taken of any possible decrease in federal government outlays abroad. We assume that our present commitment to "one world-ness" will not decrease, and neither will our outlays, in real terms. It may be argued that these expenditures might well be reduced. However, the fact that such outlays (whether military or developmental) are essentially strategic, aimed at containing communism, suggests that any substantial reduction is unlikely.

What policies are then left? A doubling of our domestic inflation rate would tend to worsen the balance-of-payments problem through reducing the favorable trade balance by (1) inhibiting exports and (2) encouraging imports. Similarly, the easy-money policy necessary to accommodate the doubled inflation rate might tend to aggravate the problem by (1) encouraging foreign borrowing in the American money and capital markets, because of lower interest rates here; and (2) encouraging American lending in foreign money and capital markets, and "hot money" flights of foreign-owned dollar balances to such markets, because of higher interest rates there. How can such adverse developments be prevented?

One possibility is export subsidies, an old device, and one still in considerable vogue in certain places (e.g., Great Britain). Payment of export subsidies would offset the inhibiting effect on exports of the rising price level. To offset its stimulating effect on imports, recourse might be had to import excises. These need not be tariffs on the importation of foreign goods, the imposition or raising of which might violate international treaty obligations, but might instead be levied as excise taxes on the sale of foreign goods in the American market—a sales tax on foreign goods, in other words, though the goods would re-

main as free as ever to enter the American market. The proceeds from the import excises could be used to pay the export subsidies, so that the project of offsetting the effects of inflation on the trade balance might be largely self-financing.

With respect to inhibiting private capital outflows, we already have the interest-equalization tax.¹² Its rate might be increased, its geographical coverage extended to include Canada and underdeveloped countries, and it could also be made applicable to short-term (bank) borrowing by foreigners as well as long-term borrowing.

Interest-equalization subsidies are also a possibility. These would be paid to foreign holders of short- (and possibly even long-) term dollar assets, to equalize any difference in domestic and foreign interest rates. Where the dollar assets are held in the form of Treasury securities, the subsidy payments to foreign holders could be direct, of course. Where the foreign-owned funds are held in some other earning-asset form—time deposits or time certificates of deposit with commercial banks, for example—the initial subsidy payment might be indirect. It could be paid to the financial institutions holding the balances, to enable them to pay foreign balance owners a higher rate than domestic balance owners. Such payments of differentially higher rates to foreigners by American financial institutions are already legally permissible. Only the subsidy would have to be added, should conditions requiring its payment develop.

Finally, if the measures designed to protect the trade balance from the effects of a higher inflation rate and to insulate the portfolio segment of the capital accounts from the effects of continued easy money should not prove sufficient to do the job, direct controls over American direct private foreign investment could be instituted. This suggestion has already been rejected by the Administration once on the grounds that if it were on a voluntary basis the desired results would probably not be achieved, and if it were on a compulsory basis, it would assume a character offensive to the American public.¹³ This seems tantamount to arguing that establishment of direct public

¹² Which increases the cost of new long-term foreign borrowing in the American capital market by about 1 per cent and also applies to the purchase by Americans of already outstanding foreign securities not owned by Americans. It is scheduled to expire on December 31, 1965, but it can of course be extended by Congress.

¹³ See Marcus Nadler, *New Tools for Credit Control* (Bulletin 31, C. J. Devine Institute of Finance, Graduate School of Business Administration, New York University, Nov., 1964), p. 11.

control over the outflow of private long-term capital is in conflict with basic American economic policy. So, however, is excessive unemployment.

3. *Economic Policy Requirements*

Achieving full employment by 1970 would appear to impose the following requirements on American public economic policy:

1. A 5 per cent real economic growth rate must be maintained.
2. Maintaining this rate requires high-pressure fiscal-policy manipulations. Specifically, deficit-financed public expenditures, ranging in current-dollar terms from \$15 billion in 1966 upwards to \$21 billion in 1970, and cumulating to \$90 billion over the five-year period, may be required.
3. These expenditures should (a) implement measures of manpower policy, with a goal of retraining at least 1 per cent of the labor force annually by 1970; and (b) concentrate also on making heavy investments in human capital.
4. Tax reduction, although still possible, is limited to the extent necessary to offset increases in tax revenues that would otherwise accompany annual increases in current-dollar gross national product.
5. A price level increase of one-sixth may result and must be accommodated. Thus restrictive monetary measures aimed at preserving price stability for balance-of-payments reasons are not permissible.
6. Consequently, the balance-of-payments problem must be handled through direct and qualitative measures rather than through inflation suppression via indirect and quantitative monetary policy. Some such measures have been suggested.

The question of whether the benefits from 97 per cent employment are worth this list of concomitant social costs is difficult to answer. Full employment has visited us so rarely that we have scarcely grown accustomed to her face. And, not knowing her well, how can we truly appraise her worth? We can of course assume the problem away by defining the full employment level as employment of 96 or even 95 per cent of the civilian labor force. But clearly, a level below 97 per cent employment is at present an unhappy compromise. The total cost of 95 per

cent employment as compared with 97 per cent, measured in terms of real GNP foregone during 1966–1970, is \$245 billion (see Table 6).

It may develop over time that a somewhat lower level of employment than 97 per cent is socially acceptable. Given greater and greater national outputs of goods, people's preferences may shift toward additional free time. In the discussion which follows, some of the long-run implications of continued economic growth, particularly its possible effects on leisure-goods preferences, are considered.

IV. *The Forms of Leisure*

Implicit in any government-spending or tax-reduction program aimed at increasing purchasing power and thus reducing unemployment is the not particularly heroic assumption that goods are preferable to unemployment. This assumption is valid, unemployment being synonymous with forced idleness in which there is no income. But the assumption of a preference for goods over time free from work appears to hold for a great many people, even when the non-working time is available in the form of a shorter workweek (reduced working hours), a shorter work year (longer vacations), or a shorter total working career (early retirement). Given the option, workers are likely to elect increased income over reduced working time. Similarly, given the problem of low annual incomes, particularly among the "poverty" group, governmental policy has endorsed greater output and incomes rather than reduced working hours.

Viewed in longer run perspective, however, growth in leisure time has been an obvious corollary of the growth in output per worker. Establishment of the eight-hour day gave the most dramatic evidence of increasing leisure, but an equally significant change has occurred in the number of non-working years. As Table 10 indicates, a male born in 1960 can expect to spend 57.5 per cent more time outside the labor force than a male born in 1900—an increase from 16.1 to 25.2 non-working years. His added life expectancy of 18.5 years is thus divided about half and half between years inside and years outside the labor force.

During the first half of the 1960's there has been some evidence of a continued drift toward reduced working time, although the workweek has seen practically no decline from the level established in the 1930's.

The reduction has taken the form, instead, of earlier retirement and increased vacation time of particular groups of workers, notably those under union contracts in the automobile and steel industries. The Social Security Act's 1961 amendment lowering the retirement eligibility age for men to sixty-two also encouraged early retirement.

But these private and public policies were not attempts to reward long service with greater leisure so much as they were devices for reducing the number of workers, either in the total labor force or in certain industries. In the case of the UAW contract, the reduction in work force was considered a necessary offset to the lowered labor-force requirements of the rapidly automating automobile industry, and the "sabbatical" plan negotiated by the steelworkers was designed to make

Table 10. *Life and Work Life Expectancy at Birth for Men, in Years, 1900-1960*

<i>year</i>	<i>life expectancy</i>	<i>work life expectancy</i>	<i>outside labor force</i>
1900	48.2	32.1	16.1
1940	61.2	38.3	22.9
1950	65.5	41.9	23.6
1960	66.6	41.4	25.2

Source: Seymour L. Wolfbein, *Changing Patterns of Working Life* (U. S. Department of Labor, Manpower Administration, Office of Manpower, Automation and Training, Aug. 1963), p. 10.

jobs available for additional men. Lowered eligibility age under the Social Security Act made it possible for men aged sixty-two through sixty-five to claim a reduced pension, and those men who are electing to do so are for the most part men who cannot find jobs.¹⁴

The fact that the primary purpose of these actions was to affect the supply of labor suggests that increased leisure time, whether legislated or negotiated, is a by-product of efforts to spread work—in short, that time free from work is not being actively sought for its own sake. One's reluctance to seek (or even accept) leisure is likely to depend, however, on the amount of loss in income associated with the increased free time—either in the form of a cut in hours with no change in total pay as opposed to an increase in income for the same workweek, or in the form of the substantial reduction in income normally accompanying

¹⁴ See Lenore A. Epstein, *Report No. 2: Work Experience and Earnings of the Aged in 1962* (Social Security Administration, 1964).

retirement. The utility of free time depends, further, on the form in which it appears. One extra week of vacation will likely have a higher utility to a man who is accustomed to working fifty weeks out of fifty-two, for example, whereas most workers seem to have strong preferences for continued work after age sixty-five.

Institutional arrangements dictate the form in which free time will be conferred on the total population, the range of possible claims being from the optimal apportionment over longer vacation, shorter workweek, longer education periods for youth, earlier retirement for the elderly, more frequent coffee breaks for all, etc., to the least desirable form, that of unemployment. What constitutes the optimal distribution of free time is not easy to discover (beyond the initial argument that, ideally, none of it appear as unemployment), partly because any addition is likely to be accompanied by an actual or potential loss of income. In recent years, the two forms in which free time has grown fastest—unemployment and retirement—have concentrated the reductions in income on a relatively small proportion of the workers, whereas alternative arrangements would have spread the leisure and income effects over most of the labor force.

Since the fruits of technology are being taken partly in a growth of leisure, it is important to consider what form this leisure should take. The issue is particularly pertinent now, when automation promises to accelerate the growth of both goods and leisure, but when unemployment threatens to absorb as much of this technical progress as we permit. The further fact that the individual has very little choice as to the form his leisure takes argues for a re-examination of the institutional arrangements, and for shaping policies that will promote what Professor Spengler refers to as the best temporal distribution of leisure.¹⁵

Returning to the earlier figures on life expectancy and work-life expectancy, it is evident that the nation's manpower potential has been rising rapidly, not only because of increased numbers of workers, but also because the average number of years spent at work is rising. A cohort of 100,000 boys born in 1900 would furnish 3,210,000 man-years of work during their lifetime, as compared with 4,140,000 man-years for a similar cohort born in 1960. A 30 per cent increase in the length

¹⁵ Joseph J. Spengler, "The Aging of Individuals and Populations; Its Macroeconomic Aspects," a paper prepared for a symposium on "Aging and Social Policy," Duke University, March, 1965.

of working life, added to the even larger rise in the proportion of non-working years described earlier, thus results from this century's increase in life expectancy.¹⁶

Of the nine added years spent outside the labor force, about four are added to the educational and five to the retirement period of man's life.¹⁷ One facet of the larger question of the appropriate distribution of leisure through the life span is the question of whether the non-labor-force years should not be apportioned more heavily in favor of the period of education and training, in return for some reduction in the number of years spent in retirement.

The argument is a compelling one, particularly since the unemployment rate for teenagers is higher than that for any other group. If one or two additional years of training beyond the high-school level became standard practice, high-school education could provide a broader base even for those students not going on to college, and the vocational educators' task would then become a feasible one. Today's acute shortage of subprofessional personnel would be eased by training programs which, with the aid of new teaching techniques, could pyramid some technical knowledge on top of an adequate high-school preparation in science and mathematics. Present attempts to prepare the high-school student for a job by giving him a course in auto mechanics (or worse still, agriculture) could yield to curricula which provided basic knowledge for any one of several types of training. Until a training program of this scope and form is launched, the teenager will continue to land, unskilled and inexperienced, in a job market that demands only the educated.

Retraining of unemployed workers who have had job experience is of course equally essential. If the goal of retraining 1 per cent of the labor force each year were taken seriously, the effect would be a massive shift in the composition of non-working time from unemployment and underemployment, as well as from retirement, into education and training. In the short run, the effort and expenditure would therefore be directed toward the group most vulnerable to job and income losses. The effectiveness of such an accelerated training and retraining program, as measured by placement rates of the retrainees and the new labor force entrants, would eventually depend on the

¹⁶ Seymour Wolfbein, *Changing Patterns of Working Life* (U. S. Department of Labor, Aug., 1963), p. 16.

¹⁷ *Ibid.*, pp. 16-17.

availability of jobs, of course. But job opportunities have a qualitative as well as a quantitative dimension, and no amount of aggregate-demand stimulation would of itself bring about the improvement in labor force quality made necessary by today's technology.

In the short run, the purpose of concentrating our efforts heavily on education and training is that of reducing unemployment among the hard-core group. The long-run implications for economic growth of a large and permanent commitment to education and training are more significant, however, as recent studies have made quite clear.¹⁸ Interest in the extent to which improvements in the quality of people have contributed to economic growth arose initially from a recognition that increases in output could not be entirely accounted for by increases in the quantity of physical and human resources.¹⁹ The fact that the tentative conclusions drawn from early studies have been widely used as a basis for justifying increased outlays for education and health²⁰ is evidence of the extent of interest in promoting greater investment in human capital.

One estimate allocates the growth rate of total real national income and the rate of real national income per person employed among the sources of growth. For the period 1929–1957, education of the average worker increased almost 2 per cent per year, which raised the average quality of labor by 0.97 per cent annually and contributed 0.67 percentage points to the growth of real national income. This improvement in labor quality accounted for 23 per cent of the growth in total real national income, and 42 per cent of the growth in real national income per person employed. Education is expected to contribute somewhat less to growth in the decades 1960–1980. For the longer run, the present rate of increase in the quantity of education appears feasible, but “a sharply accelerated improvement in the quality of education would be needed to prevent the contribution of education to growth from declining.”²¹

Although questions of the proper apportionment of expenditures

¹⁸ See, for example, a series of articles in *Journal of Political Economy*, LXX (Supplement; Oct., 1962); Frederick Harbison and Charles A. Myers, *Education, Manpower, and Economic Growth* (New York, 1964); and Gary S. Becker, *Human Capital* (New York: National Bureau of Economic Research, 1964).

¹⁹ Theodore W. Schultz, “Reflections on Investment in Man,” *Journal of Political Economy*, LXX (Oct., 1962), 1–8; and Selma J. Mushkin, “Health as an Investment,” *ibid.*, pp. 129–157.

²⁰ Mushkin, *ibid.*, p. 129.

²¹ Edward F. Denison, “Education, Economic Growth, and Gaps in Information,” *Journal of Political Economy*, LXX (Oct., 1962), 127.

among the different levels and types of education are outside the focus of this discussion, it is obviously necessary to establish some order of priority in the use of funds and scarce teaching talent. It would not be necessary to distinguish between vocational education and manpower training except for the fact that the programs are administered differently. A single administration unit should be charged with developing programs which within the next five years would approach the goal of retraining 1 per cent of the labor force annually, and it is clear that subprofessional training for high-school graduates, if not a part of the over-all manpower program, should be closely aligned with it. Finally, it is well to remember that in the United States expenditures for education are much smaller relative to gross national product (4.6 per cent) than is true for many of the other advanced countries: U.S.S.R., 7.1 per cent; Finland, 6.3 per cent; Japan, 5.7 per cent; Belgium, 5.6 per cent; and the Netherlands, 5.2 per cent.²²

In summary, questions regarding the forms in which we choose to take the growing leisure afforded by technological progress need to be considered. It would be possible, through appropriate manpower training and broader educational programs, to transfer a large portion of the time now relegated to unemployment into time spent in training. Years spent in retirement might also be reduced in favor of a longer educational period, given the kinds of fiscal policies and retraining emphasis that keep unemployment at a minimum of 3 per cent. In addition to the short-run advantages concomitant with full employment, increased investments in education have the long-run effect of raising the rate of economic growth by improving the quality of the labor force.

Addendum

A review in February, 1966, of the preceding paper completed a year earlier reveals, not unexpectedly, certain errors in its estimates. These do not appear to invalidate the argument, but a brief reconciliation of the principal differences may be in order.

Gross national product for 1965 totaled \$675 billion, \$15 billion higher than the optimistic estimates made at the beginning of the year. Almost half of this difference resulted from a revision of the GNP

²² Harbison and Myers, *op. cit.*, p. 172.

series in August, 1965; the rest is largely attributable to increased expenditures necessitated by escalation of the conflict in South Vietnam.

The 1965 increase in GNP amounted to \$46 billion, 7.5 per cent in current dollars and 5.3 per cent in constant dollars. These changes reflect a rate of price level advance somewhat more rapid than the paper assumes. On the basis of the growth rate-unemployment rate relationship postulated in the paper, however, a real growth rate of 5.3 per cent should have reduced the average unemployment rate for the year by about .6 per cent. This is, in fact, precisely what occurred. Average unemployment fell from 5.2 per cent of the civilian labor force in 1964 to 4.6 per cent in 1965.

By year-end 1965, however, under the stress of the new "part-war" set of economic circumstances, the unemployment rate had declined to 4.2 per cent; also, the pace of price level advance seemed to be quickening further, in spite of monetary and other restraining measures (voluntary wage-price guidelines, for example) undertaken during the year. The inflationary prospects associated with further reductions in the unemployment rate thus appear somewhat greater than those assumed for the years 1966 and beyond, since the analysis did not take the "guns or butter" dichotomy into account.

Charles T. Taylor* *The Demonstration Effect, Savings, and Southern Economic Development*

I

In the literature on the economic development of underdeveloped areas that has appeared since the end of World War II, there is a great deal of emphasis on consumption-saving patterns as determinants of capital investment and economic growth. Briefly, the argument runs like this: Economic growth depends upon the formation of capital, and capital formation depends upon saving. In an underdeveloped region, savings are obviously low because of the low average income out of which savings could be made and the accompanying high propensity to consume. Moreover, the problem is compounded by the so-called "demonstration effect." This is a tendency for the marginal propensity to consume in the low-income areas to rise as incomes rise because of attempts to copy the spending habits of consumers in more affluent areas. Thus, the potential increased savings that might accrue from a rising level of income are absorbed by consumption, and capital-investment expansion is hampered, if not eliminated.

Many authors use the term "demonstration effect" much more loosely than Duesenberry, the originator of the term. He conceived the demonstration effect to be the tendency of a spending unit to increase expenditures at the expense of saving when people who "habitually use one set of goods . . . can be made dissatisfied with them by a demonstration of the superiority of others." The demonstration effect, he said, did not depend at all upon considerations of emulation or conspicuous consumption.¹ As commonly used in discussions of economic development, however, the tendency toward conspicuous consumption is stressed. Thus, it is argued, not only does the normally

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¹ James S. Duesenberry, *Income, Saving and the Theory of Consumer Behavior* (Cambridge, Mass., 1952), pp. 26-27.

high propensity to consume of the low-income group increase, but the well-to-do, the most likely source of savings, are also apt to increase their spending for "luxuries" as they are exposed to higher living standards. Sometimes the concept is applied to the expenditures of governments as well.

With respect to low-income countries, the implication is that the demonstration effect is especially strong in the "developing" countries in contrast with the static ones, presumably because the process of development opens wider vistas to the people of the developing nations through more frequent contacts with more highly developed areas. This assumption—that rising incomes are accompanied by a rising propensity to consume—is contrary to both Keynesian theory and neoclassical economics. As a result, it is contended, the low-income country cannot emerge from the "vicious circle of extreme poverty, a circle proceeding from low incomes to high consumption propensities to low savings to low rates of capital formation to a continuation of low levels of income" unless domestic savings can be raised by controlling the pattern of consumption.²

The proposals to promote capital accumulation by overcoming these spending and savings tendencies take a wide variety of forms not always consistent with each other. Nevertheless, they may be conveniently classified into five major groups.³

1. Overcoming the demonstration effect by altering the pattern of consumption and saving through the use of fiscal policy and taxa-

² This thesis is summarized by Walter Heller in *Taxes and Fiscal Policy in Underdeveloped Countries* (New York: United Nations Technical Assistance Administration, 1954), pp. 2-3, and is followed by John H. Adler, "The Fiscal and Monetary Implementation of Development Programs," *American Economic Review*, XLII (May, 1952, Supplement), 593; Richard B. Goode, "Adding to the Stock of Physical and Human Capital," *American Economic Review*, XLIX (May, 1959, Supplement), 147-155; A. O. Hirschman, "Economic Policy in Underdeveloped Countries," *Economic Development and Cultural Change*, V (July, 1957), 363; Harvey Leibenstein, *Economic Backwardness and Economic Growth* (New York, 1957), p. 192; and Ragnar Nurkse, *Problems of Capital Formation in Underdeveloped Countries* (New York, 1953), p. 142.

³ Most, if not all, of these recommendations can be found in Adler, "The Fiscal and Monetary Implementation of Development Programs," *loc. cit.*; N. S. Buchanan and H. S. Ellis, *Approaches to Economic Development* (Philadelphia, 1955), pp. 303-304; United Nations Department of Economic Affairs, *Economic Development in Selected Countries* (Lake Success, N. Y., 1947), p. 15; Goode, "Adding to the Stock of Physical and Human Capital," *loc. cit.*; Heller, *op. cit.*, pp. 1-22; Hirschman, "Ideologies of Economic Development in Latin America," in *Latin American Issues, Essays and Comments* (New York, 1961), pp. 16-18; R. I. McKinnon, "Foreign Exchange Constraints in Economic Development and Efficient Aid Allocation," *Economic Journal*, LXXIV (June, 1964), 407; Nurkse, *op. cit.*; Raul Prebisch, "Commercial Policy in the Underdeveloped Countries," *American Economic Review*, XLIX (May, 1959), 264-269.

tion, i.e., import duties and excise taxes directed at consumer luxury goods, selective commodity taxation, incentive tax rates, multiple exchange rates, and similar measures.

2. Using the power of the government to create money and credit under the assumption that the increase in income generated through the pumping of additional credit into the economy will create the necessary savings, perhaps through inflation.
3. Creating special government corporations or other agencies to launch and carry out projects normally undertaken by private enterprise in more highly developed countries.
4. Encouraging the "right" private capital investment projects by government financing, tax exemptions, protective tariffs, licensing, and selective credit controls.
5. Using the tax system to channel a larger part of the national income into the hands of the government for use in financing social overhead capital and developmental projects.

Acceptance of the idea that the accumulation of domestic savings is a prior requisite to income growth or that rising consumption necessarily handicaps growth is by no means unanimous. Many see the problem of inadequate capital formation as stemming from a lack of demand for capital rather than a lack of savings.⁴ For example, W. Arthur Lewis suggests that "any sudden acceleration of the rate of capital formation is a sudden increase in the opportunities for making money."⁵ Others believe that high production of consumer goods and a high rate of consumption may be necessary to attract labor.⁶

What happens to the patterns of consumption, savings, investment, and income growth when a temporary income expansion largely exogenously induced occurs in an underdeveloped but open economy whose population is strongly exposed to the demonstration effect but where government lacks most of the powers recommended for softening

⁴ For example, see C. W. Wolfe and S. C. Sufrin, *Capital Formation and Foreign Investment in Underdeveloped Areas* (Syracuse, 1955), pp. 17-29; Thomas C. Cochran, "The Entrepreneur in American Capital Formation," and Henry G. Aubrey, "Investment Decisions in Underdeveloped Countries," *Capital Formation and Economic Growth* (Princeton, 1955), pp. 339-373 and 397-440.

⁵ W. Arthur Lewis, *The Theory of Economic Growth* (Homewood, Ill., 1955), p. 232.

⁶ R. F. Findlay, "Capital Theory and Development Planning," *Review of Economic Studies*, XXIX (Feb., 1962), 85-98, cited by McKinnon, *op. cit.*, p. 390. William I. Abraham in "Savings Patterns in Latin America," *Economic Development and Cultural Change*, XII (July, 1964), 378, states that under some circumstances, "Public policy aimed at deflecting expenditures from consumption to saving and investment may in an underdeveloped country actually reduce output and employment of resources."

the impact?⁷ A partial answer can be found by examining the experience of the Southeastern part of the United States.⁸ Prior to World War II the region comprised of the eleven Southeastern states, if not an underdeveloped area in the sense of most underdeveloped countries in the world today, was at a lower stage in its economic development than the rest of the United States. Its consumers, compared with consumers elsewhere in the United States, exhibited the expected higher propensity to consume and the lower propensity to save. Its most rapid income growth, that occurring during World War II, was largely the result of economic forces originating outside the area; and its consumers, who had undergone a type of forced savings during World War II, were free to spend their savings and current incomes as they pleased once wartime controls were eliminated. Did this condemn Southerners to the vicious circle of poverty?

By itself the record of income growth since the end of World War II seems to suggest that this was not the case. Although income statistics for 1964 show per capita income to be only 70 per cent of that for the rest of the United States, this is an improvement over the 64 per cent figure for 1945. Moreover, the Southeast is the only region in the United States in which, from 1946 through 1963, there was both an increase in personal income and a movement of per capita income closer to the national average. Most of the region's income improvement came from higher average income generated from within the economy.⁹

But if the record of income growth suggests that Southerners were able to move out of a vicious circle of poverty, was it because they did not respond to the demonstration effect? Did their thrifty habits create the savings for the capital formation that is suggested by the growth of per capita income? If not, what was the source of the funds for the capital formation that is a necessary condition for economic growth?

⁷ In a sense this was the problem analyzed by James C. Ingram, *Regional Payments Mechanism: The Case of Puerto Rico* (Chapel Hill, 1962).

⁸ The Southeast follows the classification of Howard W. Odum, *Southern Regions of the United States* (Chapel Hill, 1936). It includes the eleven Southeastern states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. It differs from the definition used by the Department of Commerce by excluding West Virginia. The words "South" and "Southeast" are used interchangeably. Although there are many differences between the economic and social characteristics of the different parts of the Southeast, the region has enough homogeneity to make generalizations possible. Such generalizations were necessary to reduce the analysis to manageable proportions.

⁹ Robert E. Graham, Jr., "Factors Underlying Changes in the Geographic Distribution of Income," *Survey of Current Business*, XLIV (April, 1964), 22-23.

In trying to answer these questions, we shall find, of course, as many students of the South have found, gaps in data for the region that ordinarily do not occur when one is studying separate nations.¹⁰ We are thus forced to rely on bits and pieces of circumstantial evidence. But this kind of experience is not unique when dealing with the empirical verification of hypotheses. Changes in the South, moreover, have been so rapid and so great that the circumstantial evidence, to the author at least, is extremely convincing.¹¹

II

Income growth in the Southeast since 1930, so far as the "catching up" process is concerned, has come about in fits and starts. As Chart 1 indicates, the "catching up" process was relatively modest in the early 1930's, improving a little in the last years of the decade; it had its greatest spurt in the years from 1941 through 1945, fell back a bit in the immediate postwar years, and then began the long pull with modest movements toward parity through the 1950's and early 1960's. The somewhat different consumption, saving, and investment patterns in each period are considered in this section.

The average income in the South was very low in comparison with that of the rest of the United States in the 1930's, prior to the period of rapid income growth during World War II. Per capita income in the Southeastern states in 1930 ranged from a low of \$203 in Mississippi to a high of \$464 in Florida. For the rest of the United States the figure was \$707.¹² Of course, the problem of inadequate income was not a

¹⁰ Some of these deficiencies in regional data are being overcome by recently developed estimates by the Office of Regional Economics, U. S. Department of Commerce.

¹¹ It may seem ironic that the United States, with such large financial and statistical resources, should be unable to provide for its regions the aggregate national income accounts available for even the most underdeveloped of the "developing" nations. One wonders, however, if the absence of the global figures may not be explained partly by the unwillingness to make the unverifiable assumptions that must have been needed to produce aggregate estimates made for many less developed areas.

¹² The income data used in this paper are derived from those of the U. S. Department of Commerce, *Personal Income by States* (Washington, 1956) and subsequent August issues of the *Survey of Current Business*. Comparisons are made with the United States outside the Southeast, rather than with the entire United States, in order to sharpen contrasts. The income data over time, of course, are seriously affected by changes in the price level. In this study, however, they have not been adjusted for price-level changes because of doubt about the appropriateness of adjusting savings data and because the emphasis is placed on annual rates that are not seriously affected by price-level changes.

Chart 1a. *Personal Income, Southeastern States and Outside Southeast, 1930-1964*

Billions of dollars

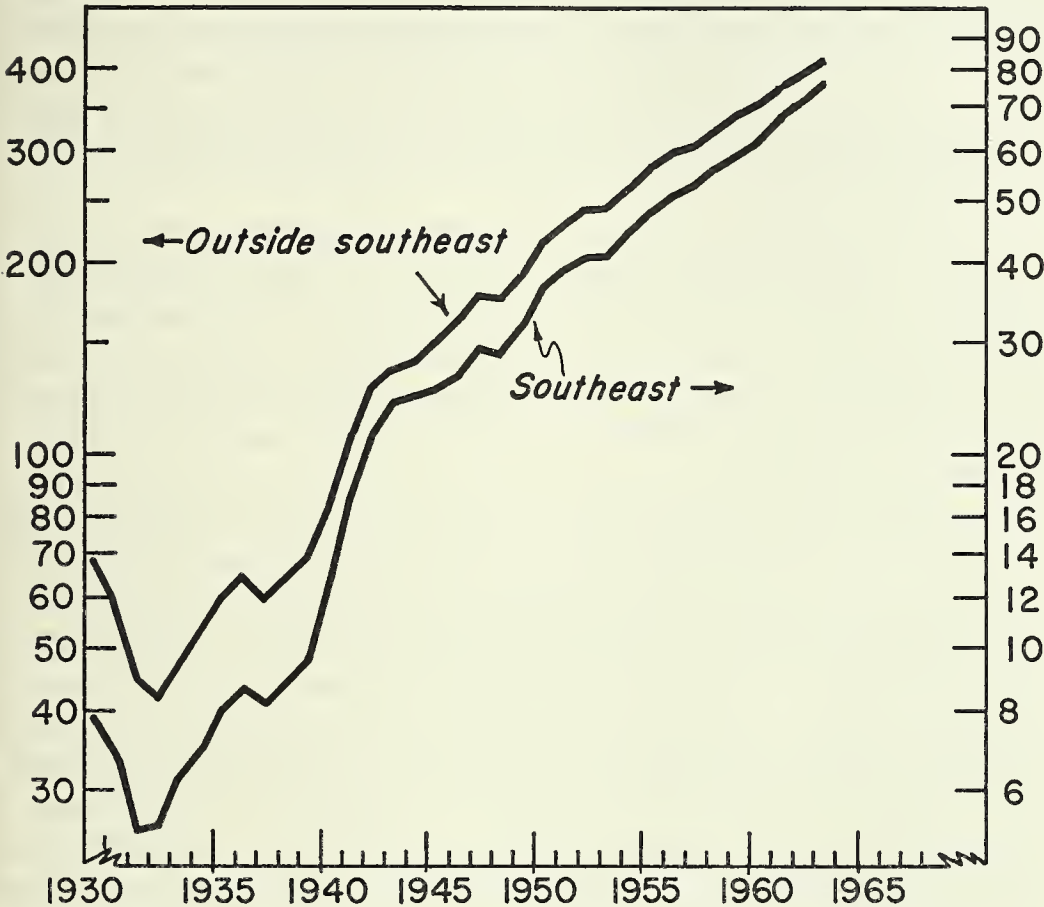
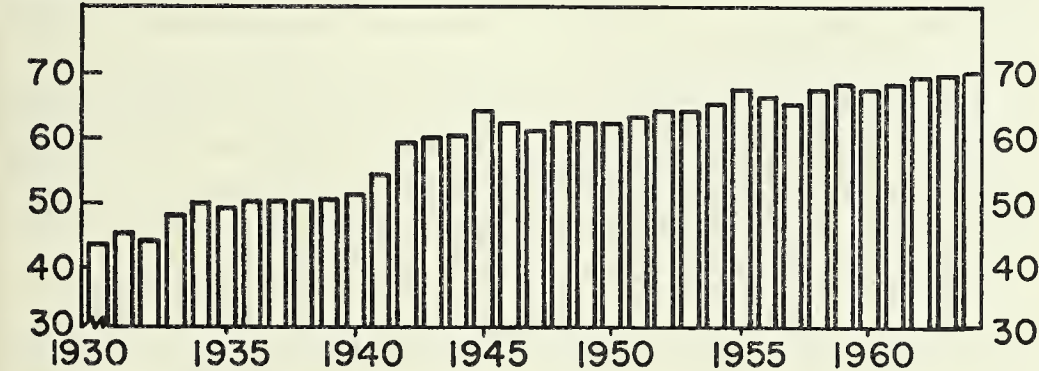


Chart 1b. *Per Capita, Southeast Per Cent of Outside Southeast*
Percent



Source: U. S. Dept. of Commerce.

unique Southern problem in the depressed 1930's. Nevertheless, the low income level of the South was only in part induced by the depression.¹³ One would expect, therefore, *ceteris paribus*, that Southerners' propensity to consume would be higher than that of Americans elsewhere in the United States. Since they were exposed to the higher levels of living of other parts of the country, we should also expect that, if the demonstration effect were operative, they would be more likely to spend additions to their low incomes than would persons elsewhere in the United States.

A tendency for consumption and savings patterns to remain static despite a rising level of income because of a rigid socioeconomic structure could provide a countervailing force to the tendency for spending to rise as incomes rise.¹⁴ The experience of Japan has often been cited as an example.¹⁵ In some respects, the South in the earlier years of this century also displayed tendencies that might dampen the demonstration effect.

Even as late as the early 1930's, many Southerners were members of socioeconomic groups whose living standards were primarily influenced by those of their own group rather than by those of Americans generally. Traditionally, the Southeast had had a fairly rigid socioeconomic structure, often closely paralleling the economic status of members of the groups.¹⁶ Thus many Southern consumers were not accustomed to making comparisons between their own and higher levels of living that generally would be made in a less rigidly structured society. For example, the living standards of urban Negroes were set by the average of their segregated neighborhoods, of the white textile workers by the standards of the mill villages, of the sharecropper and tenant farmers by those of their own economic and social conditions. Since their incomes were low, on an average, and their status changed little from one generation to another, members of these groups were not

¹³ The major reasons for Southern income growth are touched upon only incidentally in this paper. More complete discussions can be found in the author's "Income Growth in the Southern United States since 1929 as a Model of Economic Development," *Proceedings, Fourth Meeting of Technicians of Central Banks of the American Continent* (Washington: Board of Governors of the Federal Reserve System, 1955), I, 371-396, and "Patterns of Regional Growth in the United States," *Papers Presented at the Conference on Area Development* (Raleigh, May, 1962), pp. 76-83.

¹⁴ Duesenberry, *op. cit.*, pp. 32, 47-68.

¹⁵ Calvin B. Hoover, *The Economy, Liberty and the State* (New York, 1959), pp. 370-371.

¹⁶ For example, see Report of the Committee on Population Problems to the National Resources Committee, *The Problems of a Changing Population* (Washington, 1938), pp. 73-82.

likely to aspire to the consumption patterns set by the urban whites, the merchant and managerial classes, and the plantation owners. In the Southeast, as late as 1930, 70 per cent of the population were living in rural areas; in the rest of the United States, 37 per cent. Only 20 per cent of total Southern employment was in manufacturing and construction, while 44 per cent was in agriculture. For the rest of the United States, the figures were 31 and 20 per cent, respectively.

With this fairly rigid social and economic structure, it would be expected that the marginal propensity to spend would be lower for members of the low-income groups in the South than for consumers with comparable incomes in areas where a less rigid structure prevailed. For example, there was a tendency for Negroes (whose average incomes were low) to save more at lower levels than whites. Moreover, rural families, it has often been demonstrated, have a higher propensity to save from a given level of income than urban families. So long as the socioeconomic structure of the South remained rigid, members of the lower income groups had the limited horizons that W. Arthur Lewis terms "the most important limitation of men's desire for goods."¹⁷

Lack of education also limits the frequency of contact with higher standards. The lower level of education prevailing in the South in the early years of this century was, in part, a heritage from the years when there was little assumption of public responsibility for general education and, in part, from the attitudes toward racial minorities. Whatever the cause, as late as 1940, only 31.2 per cent of Southerners twenty-five years of age or over had education beyond the elementary school, compared with 41.5 per cent for the rest of the United States. This was, in part, a product of the relatively low attendance in previous years. In 1910, for example, 52 per cent of Southern children 5-17 years old were attending public schools, whereas the figure for the rest of the United States was 62.0 per cent.¹⁸

In a highly stratified society with a great deal of income inequality, preservation of the status quo may be in the best interests of the members of the higher income groups, although it means low incomes for the greater part of the members of the society. To Professor Nicholls, such seemed to be the case in the South.¹⁹ Under these conditions, an unfavorable comparison of the South with other parts of

¹⁷ Lewis, *op. cit.*, p. 29.

¹⁸ U. S. Bureau of the Census, *Census of Population*.

¹⁹ W. H. Nicholls, *Southern Tradition and Regional Progress* (Chapel Hill, 1960), pp. 43-71.

the United States in terms of average income, education, lack of public services, and similar factors worried some Southern political and industrial leaders not at all.²⁰ One consequence could well have been a lack of demand on the part of the general public for their governments to provide a higher level of public services.

The expenditure patterns accompanying the low level of income in the South during the 1930's were amply documented in the many studies of consumer expenditures made at that time.²¹ One study showed, for example, that about 55 per cent of Southern families were receiving incomes lower than the \$1,129 maintenance budget established in 1935 for the lowest-cost city in the South, and 44 per cent received incomes less than the emergency budget of \$815.²² All studies suggested that consumer expenditures would have to be increased on a large scale if the very low level of living of a great number of Southerners were to be brought up to the minimum American standard.²³

Although data on total consumer expenditures are not available, census statistics on retail trade show that retail sales in 1929, 1935, and 1939 were higher in relation to personal income in the Southeast than elsewhere in the United States. Although there is some lack of comparability in the statistics between census dates, the high ratio between the increase in retail sales in the Southeast and the increase in personal income of 73 per cent between 1929 and 1935 compared with a ratio of 60 per cent for the rest of the United States suggests a higher marginal propensity to consume in the Southeast. For the period 1935 to 1939, the ratios are 78 and 72 per cent, respectively.²⁴

Just as the average Southerner tended to spend more in relation to

²⁰ *Ibid.* However, T. R. Atkinson, "Money Income Distribution: South vs. Non-South," *Southern Economic Journal*, XXIII (July, 1956), 15-27, suggests that the greater income inequality in the South could just as well be explained by strictly economic factors as by the social and economic history of the region. He acknowledges that "to the extent . . . that factor mobility is probably greatly conditioned by social and historical developments at least part of the problem still lies outside the strictly economic sphere" (p. 27).

²¹ For example, see National Resources Committee, *Consumer Incomes in the United States* (Washington, 1938), Table 12-B, p. 98.

²² M. L. Stecker, *Intercity Differences in Costs of Living* (Washington, 1937), pp. xvii, xxvi.

²³ Carter Goodrich, B. W. Allin, and Marion Hayes, *Migration and Planes of Living* (Philadelphia, 1935), pp. 14-18. Some of the deficiencies are also outlined in National Emergency Council, *Report on Economic Conditions of the South* (Washington, 1938), pp. 21-36.

²⁴ Comparisons of sales by types are found in Ralph W. Pfouts, "Retail Trade Patterns: the U. S. and the South, 1929-1958," *Southern Economic Journal*, XXIX (July, 1962), 44-46.

his income than Americans living elsewhere, so he also tended to save a smaller proportion of his income. This conclusion is based upon an analysis of an annual time series on the holdings of savings of individuals at selected financial intermediaries. These data were used because savings data measured in accordance with the national income concept are lacking for the individual states and regions of the United States.²⁵ Saving in any one year is measured by the changes in holdings. The data for the Southeast and for the rest of the United States are shown in Chart 2.

The financial intermediary savings series is not, of course, a completely satisfactory substitute for national income account savings. There is much less volatility, especially during years of receding income, because of the contractual nature of some of the types of holdings. Nevertheless, there is a sufficiently close association between the movement of the two series to justify the making of broad generalizations about saving in general. During the period, there was a significant relationship at the national level between the annual national income saving rate (saving to personal income) and the financial intermediary saving rate (changes in outstandings to personal income).²⁶ The close relationship that ordinarily exists between saving through financial intermediaries and capital investment is also a point in the favor of the financial series.²⁷

The period from 1930 through 1941, when this country entered World War II, was marked first by a sharp decline in U. S. per capita personal income in 1931, 1932, and 1933 and next by a rapid expansion through 1937. Expansion proceeded at a somewhat greater rate in the

²⁵ The series includes holdings at the end of each year from 1930 through 1963 of time deposits at commercial banks, savings and loan shares, life insurance equities, shares in credit unions, and postal savings deposits. Holdings of U. S. savings bonds were not included because of technical difficulties in allocating such holdings to individual states. The series was developed at the Research Department of the Federal Reserve Bank of Atlanta under the supervision of L. F. Mansfield, Senior Economist, assisted by Mrs. E. W. Hartman and R. Raymond Richards, in a form comparable as nearly as possible to the series developed by the Federal Home Loan Bank Board. (See Federal Home Loan Bank Board, *Savings and Home Financing Source Book, 1964* [Washington, 1964], p. 13.) Numerous adjustments were necessary to insure the comparability of the data over time. In this paper, the term "financial saving" describes the annual change in holdings.

²⁶ A regression computed for the two rates for the years 1931 through 1962 (excluding the war years of 1941-1945) yields a correlation coefficient of +.7525 and a coefficient of determination of +.5663, a relationship significant at the 1 per cent level.

²⁷ According to R. W. Goldsmith, about two-thirds of all personal savings flowed through financial intermediaries in the 1940's and early 1950's. (*Financial Intermediaries in the American Economy Since 1900* [Princeton, 1958], p. x.) Federal Reserve flow of funds data indicate that this tendency may have become more pronounced in recent years.

Southeast than in the rest of the United States. This period was followed by one in which declines occurred in both the United States and the Southeast in 1938, after which another spurt upward through 1941 took place, again at a greater rate in the Southeast. To reduce the effect of the erratic behavior of the annual savings data, the years have been grouped for purposes of analysis by business cycle periods from trough to peak except for the period 1938–1945, which was split into the prewar and war periods.

Savings patterns were not uniform between the cycles within the

Chart 2a. *Personal Saving Through Financial Intermediaries, Southeastern States and Outside Southeast, 1934–1964*

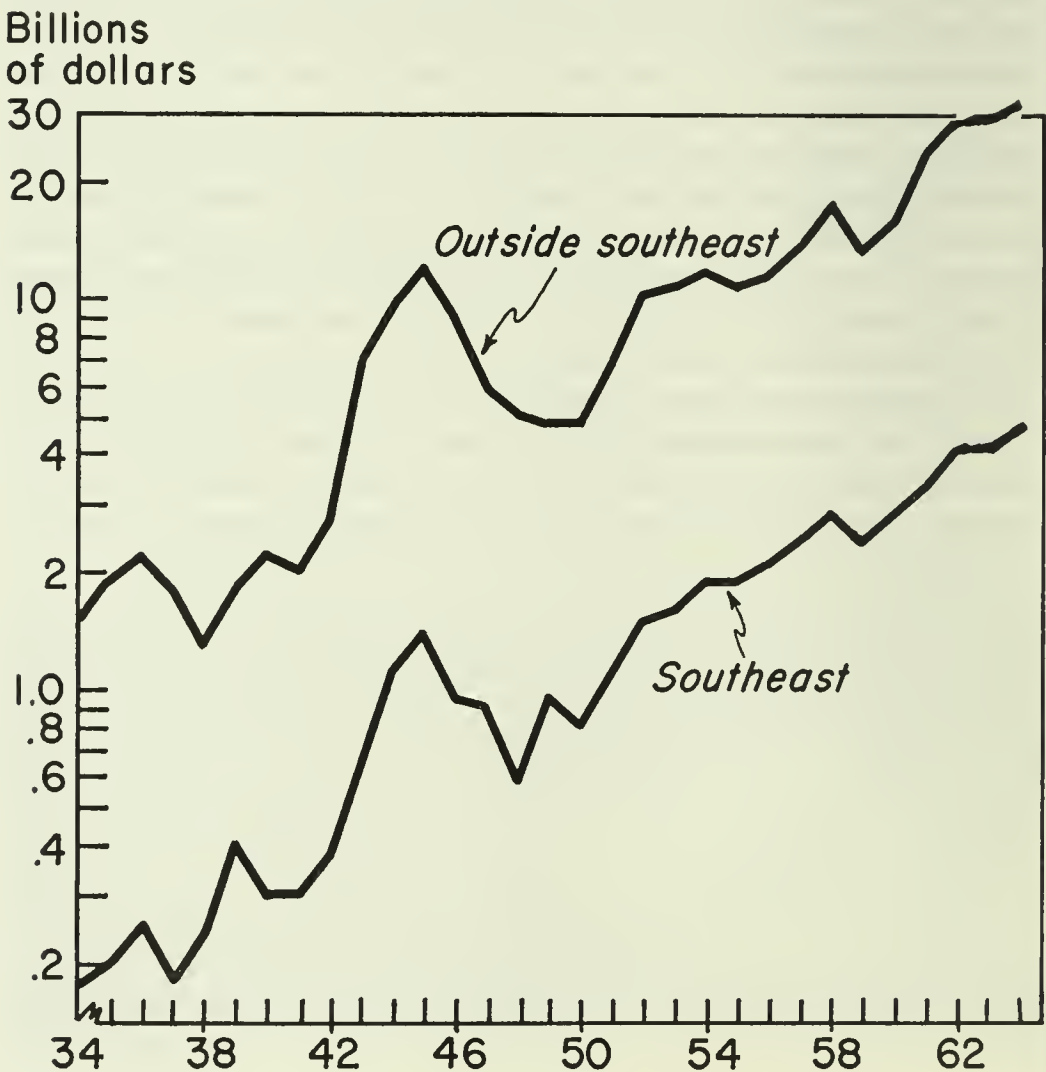
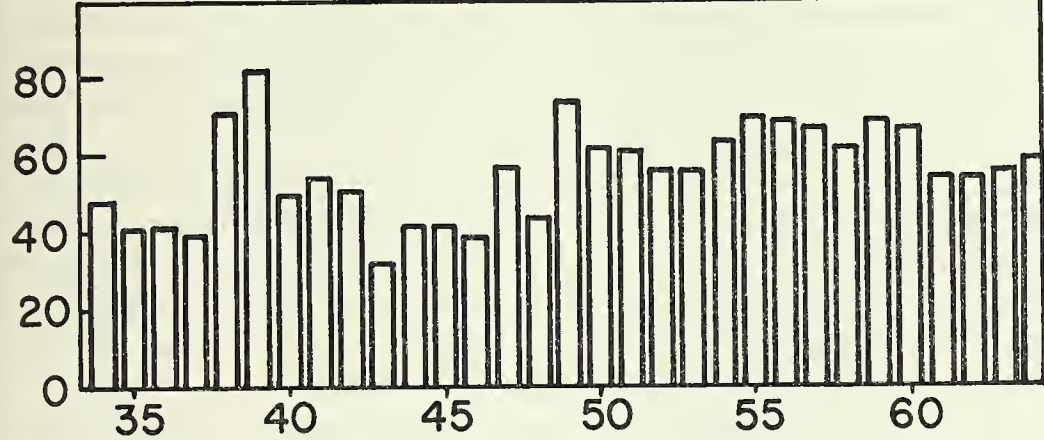


Chart 2b. *Per Capita Saving, Southeast As a Per Cent of the Rest of the U. S.*

Percent



period 1931–1941 either in the Southeast or outside the Southeast, as can be seen in Table 1. Per capita saving, as would be expected, was lower in the Southeast than in the rest of the nation. Moreover, except in the 1938–1941 period, the ratio of per capita Southeastern saving to

Table 1. *Personal Income and Financial Saving, * Southeast and Outside Southeast: Per Capita, Annual Averages of Selected Periods, 1931–1964*

	percentage change in personal income		S. E. as per- centage of out- side S. E.		rate of saving † (per cent)		marginal rate of saving ‡ (per cent)	
	S. E.	outside S. E.	income	saving	S. E.	outside S. E.	S. E.	outside S. E.
1931–33	–12.2	–15.7	45.6	43.7	–4.5	–3.6	...	...
1934–37	+12.2	+11.2	49.9	42.3	3.2	2.8	34.0	27.4
1938–41	+ 8.2	+ 6.2	51.3	64.3	2.8	3.4	...	...
1942–45	+19.3	+14.3	58.7	44.2	3.9	5.9	48.6	115.0
1946–48	+ 3.6	+ 4.5	61.8	45.0	2.3	4.2	...	...
1949–53	+ 5.3	+ 4.6	63.1	61.6	3.4	3.7	61.5	77.8
1954–57	+ 3.9	+ 3.4	65.8	61.7	4.5	4.3	71.3	94.9
1958–60	+ 3.6	+ 2.7	67.4	66.1	4.7	4.8	...	...
1961–64	+ 4.6	+ 3.4	69.0	54.7	5.9	7.4	137.5	237.6

* Annual changes in holdings at financial intermediaries. For description, see n. 25.
† Ratio of financial saving to personal income.
‡ Ratio of saving to change in personal income. Average rates not computed when period includes years when either income or saving declined, i.e., income—Southeast, 1931–1932, 1938, 1946, 1949, and 1954; outside Southeast, 1931–1933, 1938, 1949, and 1954; saving—Southeast, 1931–1933.

the rest of the nation was lower than the ratio of per capita income. The rate of saving was lower except in the 1934–1937 period. Thus, the experience of the period provides some support for both the hypotheses that we should expect the Southeast's rate of saving to be lower because of its low-income position and also that the rigidity of socioeconomic patterns might for a time limit the growth of spending during a period of rapidly rising incomes. The average annual increase of 12.2 per cent in per capita income in the Southeast in 1934–1937 was in sharp contrast to the 12.2 per cent average annual decline in the preceding three years. Possibly the yeast of the social and economic ferment that began with the New Deal, which was to break through economic and social barriers, had not yet taken effect. In any event, in the 1934–1937 period, both the saving and the marginal saving rates were higher in the Southeast than in the rest of the United States.

Nevertheless, whatever may have been the relative strength of the opposing forces prior to World War II—a rigid socioeconomic structure limiting the propensity to consume on one hand and low income stimulating consumption on the other—for the period as a whole, the average level of living was low; the propensity to consume was high; and the propensity to save was low.

The term “demonstration effect” had not yet been developed when the National Emergency Council in 1938 issued its famous report on economic conditions in the South. Nevertheless, a similar concept was very much in the minds of the authors of the report when they wrote:

The South is the Nation's greatest untapped market and the market in which American business can expand most easily. The cost of “selling” the South modern conveniences is already being borne, to large extent, since the methods that now sell the rest of the Nation reach the South with little or no extra cost. Radio, movies, periodicals, and other instruments of national scope for acquainting the public with new things have “sold” southerners as they have sold other Americans. There are no language barriers, no geographical obstacles, no tariff walls, no psychological difficulties to be overcome. The people of the South need to buy, they want to buy, and they would buy—if they had the money.²⁸

Economic developments during World War II provided Southerners with at least some of the money and also afforded an opportunity to compare prediction with performance.

In the years 1942 through 1945, Southerners increased their personal

²⁸ National Emergency Council. *op. cit.*, p. 61.

incomes at an average annual rate of 19.3 per cent, a more rapid rate than in any period before or since. Part of the dollar growth reflected inflationary developments, although rapid inflation did not begin until after World War II ended. Nevertheless, per capita income in the Southeast increased from \$435 in 1941, or 54.3 per cent of that elsewhere in the United States, to \$864 in 1945, 64.1 per cent of that of the rest of the nation. The over-all average for the period was 58.7 per cent.

Most of the income expansion came from expenditures made in the South for training of the armed forces; war-induced prosperity for Southern agriculture, reflecting favorable demand shifts; construction of defense installations; and swollen payrolls for manufacturing a limited amount of munitions and war-related products, rather than from an increase in productivity related to permanent capital investment. Wartime industrial expansion came late to the South, and the postwar conversion of specialized war industries was disappointing.²⁹

Thus, developments in the South during the war period produced a situation in which the people of a low-income area with a high propensity to consume were suddenly presented with a substantial increase in their purchasing power. Would they, in accordance with theory, spend the major portion of their additional income? Actually, they could not do exactly what they might wish, for during this period many of the constraints on spending that are prescribed for developing nations were imposed, not, of course, for the purpose of promoting capital development, but as wartime controls. Shortages of consumer goods, rationing, credit controls, and special efforts to promote saving, however, did have the effect of restraining spending. By the end of 1945 per capita holdings of savings at financial intermediaries in the Southeast were \$297, compared with \$173 at the end of 1941. These figures do not include holdings of U. S. savings bonds, which were probably about a third as great as savings holdings at financial intermediaries.³⁰

Yet, if constraints were imposed on consumer spending in the Southeast during the war period, the force of the urge to spend could not be diminished completely. Since no Census of Distribution was

²⁹ F. R. Deming and W. A. Stein, *Disposal of Southern War Plants* (Washington, 1949).

³⁰ Charles T. Taylor, "District Long-Term Savings, a Source of Investment Funds?" in *Sources of Funds for Capital Investment in the Southeast* (Atlanta: Federal Reserve Bank of Atlanta, 1960), pp. 11-15.

conducted during the period, comparisons of retail sales are not possible, but a lower propensity to save became strikingly evident early in World War II in connection with the purchase of war bonds. During the war years, income was growing most rapidly in the low-income states of the nation, and most of these states were in the South. According to a computed line of regression, in a state with a per capita income of \$400 in 1941, 24 cents out of each dollar increase in income would be expected to go for the purchase of war bonds, whereas in states with per capita incomes of \$1,000 each dollar increase produced 57 cents toward the purchase of war bonds. Per capita income in the Southeast averaged less than \$400 in 1941.³¹

Personal financial saving in the Southeast for the years 1942 through 1945 averaged 3.9 per cent of Southeastern per capita income, compared with a rate of 5.9 per cent for the rest of the United States. For these years financial saving in the Southeast averaged 48.6 per cent of the average increases in the region's per capita personal income, compared with 115.0 per cent outside the Southeast.

Also in the World War II period, changes already operating on the social and economic structure of the South accelerated, thus initiating a process that is continuing even today. To the extent that the South's previous socioeconomic structure had dampened the propensity to consume, alterations had, by the end of World War II, brought about a weakening of the constraints and an environment more favorable to the operation of the demonstration effect than before.

For one thing, Southerners, in the words of Lewis, began to live more "mixed up"; they changed their occupations; they changed their residences; and, in the process, they were exposed to higher living standards. A revolution in agriculture pushed the tenant farmer and sharecropper off the land and to the city; the mushrooming war industries drew many Southerners into factories for the first time; the demand for labor induced workers to leave the South and exposed Southerners to consumption habits in other areas; Southern members of the armed forces were exposed to a different way of life in other parts of the country; and changes in the industrial pattern reduced wage differentials and eventually led to the virtual elimination of such features of Southern life as the isolated mill village and the company store. For the members of formerly isolated socioeconomic groups,

³¹ Charles T. Taylor, "Voluntary Savings and Consumer Behavior," *Southern Economic Journal*, X (Jan., 1944), 239-245.

these changes could have no other result than to shift consumption-demand schedules to a higher level.

Between 1930 and 1940, for example, agricultural employment as a percentage of total employment in the Southeast dropped from 44 to 31 per cent and, by 1950, to 24 per cent. By 1960, it had fallen to 11 per cent. Between 1940 and 1950 manufacturing and construction employment grew from 19 to 26 per cent of total employment and, by 1960, reached 30 per cent. In the process, as a comparison with the corresponding figures of 29, 33, and 34 per cent for the rest of the United States suggests, employment patterns in the Southeast became more like those in the rest of the nation.

A change in the attitude of Southern leaders was an important ingredient in this process of change. In 1938, when the National Emergency Council issued its report with President Roosevelt's preface labeling the South as "The Nation's No. One Economic Problem," many Southerners indignantly repudiated the label. For example, Fitzgerald Hall, President of the Southern States Industrial Council, wrote: "That the South is 'The Nation's No. One Economic Problem' is not supported by the facts."³² After observing the war-induced income expansion of the postwar period, however, many more Southerners joined the ranks of those who acknowledged that the South did indeed have a problem of catching up with the rest of the nation. Southern vs. non-Southern comparisons began to be accepted more and more as a challenge to the South and less as a condemnation of it.

Just when an increasing sense of social responsibility began to develop cannot be specifically dated, but wartime developments hastened the process.³³ These new attitudes may have been one element that speeded up the expansion of the services provided by state and local governments, especially education. Moreover, partly in response to the fear of forced integration for lack of compliance with the "equal" aspect of the "separate but equal" doctrine, some progress was being made in improving Negro education. In 1950, 71 per cent of the Southerners in the 5-to-20 age group were attending school, compared with 64 per cent in 1930. All of these elements of change undoubtedly heightened the forces of the demonstration effect.

Even before the war ended, many Southerners were concerned about

³² Southern States Industrial Council, *Comments on the Report on Economic Conditions of the South* (Nashville, 1938).

³³ Professor Nicholls believes that many vestiges of the individualistic philosophy continue today (*Southern Tradition and Regional Progress*, p. 65).

how the South might retain its economic gains. They recognized the temporary nature of some of the forces and the need for more permanent types of capital investment as a basis for permanent income growth. To those persons who saw a direct dependence of capital investment in the South upon the savings of Southerners, the accumulated wartime savings seemed to provide a basis for growth only if they could be retained in the area. However, many of them saw little hope of retaining these funds once wartime controls and shortages were eliminated and Southern consumers resumed their normal spending habits.³⁴

Governments in the area were unable to prevent this expected outflow of funds resulting from the propensity of the Southern consumer to spend, for they had no powers that could be exercised to alter effectively the flow of funds out of the area or to alter consumption and savings patterns within it. For one thing, the Southeast was not a nation in itself but was a region composed of a number of individual states, each with its own state government, that were united only by geographical propinquity, tradition, and some common economic and social characteristics. These state governments lacked the powers to institute tariffs and import, export, monetary, credit, and exchange controls, which are generally considered to be essential in the kit of tools for carrying out a program of economic development in low-income countries.

Attempts, of course, have been made by state governments to do indirectly, within the framework of their constitutional powers, what they could not do directly. A long list of regulations, all designed to limit the flow of goods and money, that have been imposed within the framework of the states' constitutional powers could be compiled. Among them would be special licensing provisions, inspection and grading requirements for farm products, preferential excise tax structures, and highway and truck regulations.³⁵ In addition, some state governments attempt to "keep money at home" by requiring, for example, that a given proportion of the proceeds of insurance premiums be invested in the state or that mortgage loans made outside the state bear higher interest rates than those made to borrowers within

³⁴ Calvin B. Hoover and B. U. Ratchford, *Economic Resources and Policies of the South* (New York, 1951), pp. 172-173.

³⁵ This concern with interstate barriers is of long standing. For example, see Charlotte A. Hankin and S. Chesterfield Oppenheim, *Barriers to Trade Between States* (Washington: Works Progress Administration, 1939).

the state. Other states offer special inducements to attract industry, including tax exemption and special authority financing. On the other hand, a careful study of the nation's financial structure and institutional practices reveals the apparent ineffectiveness of such measures to impede or alter materially the flow of goods and money between the states.³⁶ All things considered, therefore, pessimism about the possibility of retaining funds within the South, contrary to the desires of consumers, seems to have been justified.

What actually happened to income and spending in the United States immediately after the war confounded most prophets. Instead of declining in a deep postwar recession, income expanded; and inflationary instead of deflationary developments took place. The Southeast, however, was not as fortunate as other parts of the country with respect to income growth. In 1946 per capita income in the Southeast declined, contrary to developments elsewhere; and, although income expansion was resumed in 1947 and 1948, the annual average rate of growth in the period was less than in the rest of the country.

Direct evidence of consumer spending patterns in the Southeast in the immediate postwar years is even more scanty than for the prewar period. There was evidence enough, however, from limited sales data for department stores, some durable goods stores, and auto sales for the Southeast to earn a reputation of being one of the most rapidly expanding retail markets in the nation.³⁷ The Census of Distribution for 1948 showed that retail sales in the Southeast continued to bear a higher relationship to personal income than elsewhere in the nation—66 per cent, compared with 62 per cent.

Increased spending and the slowdown in the Southeast's rate of income growth were reflected in the drop in the region's rate of saving

³⁶ Richard N. Cooper, *Rules and Behavior in the World Economy*, Center Paper No. 57 (New Haven: Economic Growth Center, Yale University, 1965), pp. 112–113, states:

"Wide taxing powers are nominally reserved to the states. Yet while authorities in State taxation complain bitterly about the large differences in tax structure and tax treatment of business income and commodities from State to State, what is striking to an international economist is how very narrow these differences are by international comparison. . . .

"Under this pressure of acute competition for industry measures are taken which benefit industry but which, since most states are following similar practices, may not much affect the actual location of industry."

³⁷ Basil A. Wapensky, "A Decade of Consumer Spending," *Monthly Review* (Atlanta: Federal Reserve Bank of Atlanta, June, 1952), pp. 45–48; C. T. Taylor, "District Long-Term Personal Savings," *Sources of Funds for Capital Investment in the Southeast* (Atlanta: Federal Reserve Bank of Atlanta, 1960), pp. 11–15, and "Bank Financing of Sixth District Retail Trade," *Credit Needs of Business Borrowers* (Atlanta: Federal Reserve Bank of Atlanta, 1960), pp. 29–36.

from 3.9 per cent in the war period to 2.3 per cent. (See Table 1.) This figure was well below the national rate. Whereas per capita income in the Southeast averaged 61.8 per cent of the rest of the nation's in 1946-1948, savings averaged only 45 per cent. Thus, consumers in the Southeast during this period behaved as consumers would be expected to behave when the forces producing the demonstration effect are strong.

However, the spurt in spending and the drop in saving that occurred in the initial postwar period of 1946-1948 did not continue. Since that time the annual rate of increase in per capita income in the Southeast has averaged higher, but not greatly higher, than that of the rest of the country; and the Southeast's per capita income has moved slowly toward the figure for the rest of the nation. (See Table 1.) Apparently there has also been a change in the pattern of saving, with the annual rates of saving in the Southeast moving closer to those of the rest of the country. Indeed, in the period 1954-1957, the Southeastern savings rate was greater. (The high rate for outside the Southeast in the 1961-1964 period is largely explained by an atypical shift to commercial bank time deposits.) Moreover, the ratio of per capita savings in the Southeast in the 1950's and early 1960's is higher in relation to the rest of the United States than it was in the prewar period. Thus, a case could be made that Southeastern spending and saving patterns are becoming more like those of the rest of the nation.

One of the difficulties of using empirical data to verify a hypothesis is that the data are subjected to so many influences other than those under consideration that there are a great many exceptions to general tendencies. This is especially so when one deals with such unstable relationships as the consumption and savings function and such a tenuous concept as the demonstration effect. Nevertheless, certain implications can be drawn from the bits and pieces of evidence that have been reviewed.

Comparison of the Southeast with the rest of the United States confirms the hypothesis that consumption is likely to be higher and saving lower in relation to income in a low-income region and that this relationship is likely to persist over time. Evidence of the operation of the demonstration effect is less clear. Nevertheless, the experience of the Southeast seems to show that, given a sudden increase in income as in the period of World War II, consumers are more likely to try to catch up in their spending than in their saving. When income growth

becomes more gradual, however, as in the 1950's, the impulse to step up spending is less pronounced. Nevertheless, over the entire period, the rise in the level of living in the Southeast has kept pace fairly well with rising incomes. Had the Southern consumer maintained the levels of living prevailing in the 1930's, of course, savings rates in the 1950's and the 1960's would have been extremely high.

The experience of the Southeast shows that, in an area with low but rising average income, saving *can* take place even when the consumer is generally free to spend his income as he sees fit and is subjected to pressures to spend by the example of higher levels of living nearby and by all the blandishments of advertising and high-pressure selling. Nevertheless, despite the relatively good savings record in the Southeast, it is obvious that the region's savings would be inadequate to provide funds for capital investment at a rate equal to that of the rest of the country. Had capital investment been limited to the area's saving, the rate of per capita investment in the Southeast would have been about half that of the rest of the nation. This, however, was not what actually happened.

III

The lower level of saving in the Southeast did not set the limit on capital investment. On the contrary, during the period reviewed, the Southeast's share of the nation's capital investment was greater than its share of either the nation's personal income or saving, according to three measures of capital investment. These three measures—per capita expenditures for new manufacturing plant and equipment, construction contracts, and capital outlays of state governments—were all greater in relation to the per capita figures for the rest of the United States in all of the periods reviewed and in relation to income in all but one period.³⁸ (See Table 2.)

³⁸ The increase of capital investment in the Southeast is also indicated by other measures. For example, Lowell E. Gallaway in his "Regional Capital Estimates by Industry, 1954-57," *Southern Economic Journal*, XXIX (July, 1962), 21-25, has developed estimates for fixed capital by industry using a Cobb-Douglas type production function. His estimates indicate that fixed capital stock in manufacturing in the South Atlantic and East South Central states increased from 11.8 per cent of the U. S. total in 1954 to 13.8 per cent in 1957. George H. Borts and Jerome L. Stein, *Economic Growth in a Free Market* (New York, 1964), p. 45, cite a study by J. T. Romans that indicates "that capital moves among U. S. regions in accordance with our theory; that is, capital moves from regions of low growth to regions of high growth." The same authors also

There has been some tendency for the ratios of the measures of capital investment in the Southeast to those of the rest of the United States to increase over time, but this improvement has not been related to changes in the savings ratios. Capital investment expenditures in the

Table 2. *Per Capita Personal Income, Saving, and Capital Investment Ratios, Southeast to Outside Southeast (per cent): Annual Averages of Selected Periods*

	<i>personal income</i>	<i>saving</i>	<i>measures of capital investment</i>		
			<i>expenditures for new mfg. plant and equip- ment</i>	<i>construction contracts *</i>	<i>state govt. capital outlay</i>
1931-33	45.6	43.7	<i>n.a.</i>	55.5	91.7
1934-37	49.9	42.3	<i>n.a.</i>	82.9	92.9
1938-41	51.3	64.3	54.9	73.7	128.2
1942-45	58.7	44.2	<i>n.a.</i>	118.2	143.6
1946-48	61.8	45.0	60.3	83.4	130.1
1949-53	63.1	61.6	64.4	94.0	104.6
1954-57	65.8	61.7	67.2	79.4	90.0
1958-60	67.4	66.1	73.7	88.2	91.4
1961-63	68.6	53.9	80.9	91.5	100.5

* Since construction contracts prior to 1956 exclude those for eleven Pacific and Mountain states, comparisons for 1931-1953 are made between the Southeast and the states outside the Southeast, excluding the Pacific and Mountain states.

n.a.—Not available

Sources: expenditures for new manufacturing plant and equipment, Bureau of the Census; only data for 1939 are available for the 1938-1941 period. Construction contracts, F. W. Dodge Corporation. State government capital outlays, Bureau of the Census; data for the period 1931-1933 are available only for 1932, and no data are available for 1939 in the period 1938-1941.

Southeast apparently are more closely related to such influences as specific investment opportunities, rather than to the availability of local saving. There is, moreover, a closer relationship between the relative levels of capital investment and income than the levels of investment and saving, suggesting that investment opportunities have accompanied economic growth, although it is impossible to establish any causal connection.

assume that an increase in the proportion of property income to total personal income in the region is evidence of capital formation (p. 145). In the Southeast the rate of increase in property income from 1918 to 1962 was greater than in any other region except the Rocky Mountain and Far West regions (Graham, *op. cit.*, p. 23).

If the comparisons of saving and investment do nothing else, they show that all the capital investment funds in the Southeast could not have come from this area alone; they had to come from outside the region. Thus, the ratios merely confirm the results of various studies of the channels through which capital investment funds have been transmitted to the South.³⁹ The major share of the cost of new manufacturing concerns has been financed by national firms, and the greater part of the financing of new and expanded local manufacturing plants also has come from outside the South. Residential construction has been financed by non-Southern money; capital outlays by Southern state and local governments were made possible by the sale of securities in the national money markets; and most of the public utility expansion has been financed nationally. Non-Southern insurance companies typically have paid death benefits and made investments in the South exceeding premium income by a large margin. Commercial banks located outside the South have made substantial loans to Southern business. The financial ties between the South and the national money and capital markets are strong, and institutional arrangements exist to facilitate the flow of funds toward the South.⁴⁰

Is the South's experience a modern version of *The Fable of the Bees*? Was its prosperity the reward of its improvidence? Did the Southeast's spending create the economic opportunities that attracted capital investment?

Undoubtedly, the South's growing consumer market has stimulated part of the investment in manufacturing in the Southeast since the end of World War II. McLaughlin and Robock, in a study made soon after the end of World War II, found that the most important factor inducing investment in manufacturing in the South was the expanding Southern market.⁴¹ Prior to the war, the Southeast, of course, had manufactured consumer goods but mostly for export to other sections. Now, it began to produce for itself. Evidence of the expansion of this growing industry to meet demands of Southern consumers can be

³⁹ The results of studies made as parts of a continuing research program on Southern finance have been published in the Federal Reserve Bank of Atlanta's *Sources of Funds for Capital Investment in the Southeast* (1960), *Essays on Southern Economic Growth* (1961), and *Population Change and Economic Change in the Southeast* (1963).

⁴⁰ The magnitude of the flow of funds between banks in different regions is discussed by N. N. Bowsher and others, "The Flow of Funds Between Regions of the United States," *Journal of Finance*, XIII (March, 1958), 1-20. See also Otis Dudley Duncan and others, *Metropolis and Region* (Baltimore, 1960), pp. 105-123 and 133-154.

⁴¹ Glenn E. McLaughlin and Stefan Robock, *Why Industry Moves South* (Washington: National Planning Association, 1949), pp. 26-32.

found, for example, in the increased assembly of automobiles in the area and the development of local suppliers for these plants. Then, too, the growth of distribution in itself has produced income-yielding activities.

Too much can be made of the influence of the developing market in inducing investment in the South, however. As Victor R. Fuchs says: "Market-oriented industries are only a small part of total manufacturing and . . . a significant portion of the change in demand . . . should probably be considered as a result of redistribution of manufacturing rather than its cause."⁴² Nevertheless, he did find that market-oriented industries tended to grow faster in the Southern states than in the rest of the United States from 1929 to 1954, although non-market-oriented industries grew even faster. Fuchs and others who have made similar locational studies suggest that at least part of the South's industrialization may have resulted from efforts to supply the local consumer market, a market that was growing faster than could be explained by income growth alone. However, increased consumption, resulting partly from the operation of the demonstration effect, could not be properly considered as the sole, or even the most important, cause of Southern industrialization. The burgeoning chemical, paper, and pulp industries in the South, for example, resulted from efforts to supply national markets, not expanded local markets.

On the other hand, the demonstration effect may have indirectly stimulated the factor adjustment, both within the South itself and between the South and the rest of the United States, that has been an important reason for the South's income growth. Shifting labor from low productivity sectors, especially agriculture, into high productivity sectors within the South and to other parts of the nation has been one of the most important parts of the process of resource adjustment. The demonstration effect undoubtedly has helped speed up this resource adjustment by encouraging migration, an essential ingredient of Southern income growth.

Although, when considering the Southern region as a whole, the process of industrialization seems to have been one of bringing capital to labor, the location of the industrial expansion in certain places in the South rather than in others seems to have borne little relationship

⁴² Victor R. Fuchs, *Changes in the Location of Manufacturing in the United States Since 1929* (New Haven, 1962), p. 163.

to the local supply of labor. Rather than taking capital to labor, new economic opportunities drew labor to capital, a conclusion supported by the rapid growth of the South's major metropolitan areas. Exposure to the higher living standards in urban areas through better education, the press, television, and other means must have been an important force drawing the necessary workers from the rural areas.

What made these people move? As Kuznets points out, the decision to migrate arises from comparing the increased cost of staying put with the increased attractions of moving elsewhere. The latter may stem from both greater earning opportunities in other areas and from greater opportunities to improve consumption patterns, either in the form of a wider variety of goods and services, easier access to them, or an enjoyment of some of the amenities provided by governments and educational institutions. But if these forces are to be effective, there must be a realization of the greater opportunities for higher income and higher consumption, one of the forces involved in the demonstration effect, that might be gained from migration.⁴³

However, to some extent, the South's industrialization did consist of bringing capital to the labor supply, especially in the cases of apparel and other types of labor-intensive manufacturing. Here, too, the demonstration effect may have been helpful. Through increasing contacts with other parts of the United States, Southerners had become more aware of the higher level of public services enjoyed in other parts of the country, and they began to demand improved services from their own governments. This improvement and the increase in social capital may have helped to attract more industry to certain areas with an abundant labor supply.

Despite gains in Southern productivity resulting from capital investment, factor adjustment, and gains in income from other sources, the South's improved per capita income position could not have been achieved without the net out-migration, especially of the non-white population, that took place.⁴⁴ Part of the South's improved per capita income position is explained by there being fewer persons to share the total product than there would have been had net out-migration not taken place. As in the adjustment of the labor supply to locational

⁴³ Simon Kuznets, in Hope T. Eldridge and Dorothy Swaine Thomas, *Population Redistribution and Economic Growth, United States, 1870-1950* (Philadelphia: The American Philosophical Society, 1964), pp. xxiii-xxxv.

⁴⁴ Graham, *op. cit.*, p. 32.

demands, out-migration was a response to the desire to enjoy higher living standards outside the South or, in other words, a clear response to the demonstration effect.

IV

The evidence reviewed supports the hypothesis that the consumption and saving patterns in the Southeast since the early 1930's have been influenced by the demonstration of the superiority of higher levels of living elsewhere in the United States. Although saving has been lower than it would have been had Southerners maintained the level of living prevailing at the beginning of the period and had income grown at the same rate, Southern economic growth apparently has not been hampered. Because of the free flow of investment funds into the South, capital investment did not depend on the rate of Southern saving. Economic opportunities in the South drew capital investment funds into the region—economic opportunities that were, in part, a response to a growing consumer market and, more importantly, to structural, economic, and social changes. Both can be associated with the demonstration effect.

Despite the improvement in income, the South still remains a relatively low income region. Would the South's per capita personal income, now about a third less than that of the rest of the nation's, be greater if Southerners had been compelled to be more frugal? The answer can be yes only on the assumption that the income growth that actually occurred would have been exceeded or duplicated within the framework of the economic controls required to alter consumption patterns. The results of such a program in other underdeveloped areas of the world do not suggest that such would have been the case. Even under the authoritarian communistic regimes, where the withholding of income from consumers for purposes of capital investment is a predominant characteristic, there are few, if any, examples of an outstanding success in raising income.⁴⁵ The South was fortunate in avoiding this pattern.

Among the underdeveloped areas of the world, the South is, of course, a special case. But the characteristics that make it a special case are all elements in some degree of the normally functioning modern

⁴⁵ Hoover, *op. cit.*, p. 372.

capitalistic system, e.g., absence of restrictions in the movement of money, goods, and men into and out of the area, the allocation of economic resources in response to market forces, a sustained economic growth stemming from capital investment, and a relatively stable government devoted to increasing social overhead capital, welfare, and improvements in education. At the same time, the process of capital investment in the Southeast has been subjected to the discipline of the market. There was, for example, no Southern central bank that could insulate either private or public borrowers from the forces of the money market; Southern borrowers had to compete with borrowers from all over the United States. Moreover, the economic opportunities that drew funds to the South had to be weighed against those elsewhere, and Southern enterprises had to compete with their national counterparts.

In the modern world, complete *laissez faire* cannot be relied upon as a sole force in economic growth, if it ever could have been. As Professor Hoover has indicated in *The Economy, Liberty and the State*, government intervention has a leading and perhaps a crucial role to play in the successful functioning of the modern capitalistic system.⁴⁶ Nevertheless, the South's experience suggests that consumer sovereignty need not necessarily be sacrificed as the price of economic growth.

⁴⁶ Hoover, *op. cit.*, pp. 373-376.

James J. O'Leary* *The Financing of Capital Formation in the United States and Soviet Russia*

One phase of the struggle between the East and West is the competition between economic systems. Which is superior in terms of productive efficiency and capacity for growth—the planned economy of Soviet Russia or the enterprise economy of the United States? The heart of the process of growth in any economic system is, of course, the formation of physical capital. Much has been written about the comparative rates of physical capital formation in the United States and the Soviet, but there has been very little discussion of the comparative financial systems, undoubtedly because of the lesser role of finance in Russia. The purpose of this paper is to compare the financing of capital formation in the two countries.

The paper will first consider the markets for money and capital funds in the United States. It will review the sources and uses of such funds and will discuss some of the important characteristics of, and trends in, the American markets. It will then turn to the financing of capital formation in the Soviet Union with a discussion of the use of the Soviet budget for capital financing and the role played by financial institutions. It will conclude with a discussion of the comparative record of physical capital formation in the two countries.

The Markets for Money and Capital Funds in the United States

The United States has undoubtedly the most comprehensive and effective financial system in the world. The development of this system is in no small measure the result of two conditions which the nation has enjoyed: an orderly and stable system of government and, compared

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with other countries, a high degree of stability of the general price level.

Sources and Uses of Funds: The Concepts Employed

Perhaps the easiest way to obtain a picture of the American financial system is to refer to Table 1, "Sources and Uses of Funds in the United States Money and Capital Markets, 1947-1964." The data presented are designed to show the various uses of money and capital funds and the various sources of such funds. The principal focus is on the markets for long-term funds, but the table also includes various types of short-term credit, such as business and consumer credit. The financial system is so interrelated that it does not seem worthwhile to attempt a separation of short- and long-term markets. Indeed it is virtually impossible to separate these markets in a meaningful way. Many short-term bank loans, renewable, for example, are virtually the same as long-term loans. The expansion of commercial bank credit has such an important effect on both short- and long-term markets that it must be taken into account in both areas of the market.

Before discussing the individual items in the table, it is desirable to note that all of the data are on a *net* basis. For example, the figure of \$5.9 billion for life insurance companies in 1963 measures the net increase in invested assets—bonds, stocks, mortgages, and so forth—held by such companies. The data for other sources are also on a net basis. Under uses of funds, the figure of \$5.5 billion for corporate bonds in 1963 measures the increase in corporate bonds outstanding. The other data under uses of funds are on the same basis, i.e., the increase in outstandings. It should also be stated that the table is designed to measure sources and uses of funds in the money and capital markets of the United States. That is, for example, to the extent that American life insurance companies added to their holdings of Canadian bonds, this amount would not be included in the figure for life insurance companies as a source of funds, nor would the figure for the Canadian bonds be included in the uses of funds.

The fact that the data in Table 1 are on a net basis leaves something to be desired. In some respects it would be preferable to have a measure of the *gross* flow of funds into the money and capital markets. However, it is impossible at the present time to obtain reliable gross flow data for more than one or two sources of funds. Table 2 illustrates the magnitude of and the component parts of the gross flow of funds

into long-term investment by the life insurance companies. It is based on a quarterly report made to the Life Insurance Association of America by companies holding 61-62 per cent of the assets of all United States life insurance companies. The items in the table are largely self-explanatory. The net change in "ledger assets" is roughly equivalent to the net new saving through life insurance. The item "mortgages" represents the regularly scheduled amortization payments and other repayments on mortgages held by the reporting companies, and the item "securities" represents the maturities and other repayments on the securities accounts of these companies. It is interesting to note that the estimated total investment funds of these reporting companies in 1964 was about \$10 billion. Assuming the remainder of the life insurance companies have had a similar experience, the gross flow of funds from the life companies into the capital market in 1964 was in excess of \$16 billion, a figure amounting to about one-third of the GNP of Canada. The net figure for life insurance company investment in 1964, as shown in Table 1 (not strictly comparable because it excludes a small increase in holdings of foreign securities), was estimated to be \$7.1 billion. Thus, in the case of the life companies, the net source of funds was less than half the gross. A similar relationship would probably exist for most of the other sources of funds.

The Individual Uses of Funds

Turning now to the individual uses of funds in the lower panel of Table 1, it is interesting to note how stable the net increase in corporate bonds has been each year during the past decade, as well as how small a proportion of corporate funds is drawn from the corporate bond market. The same statement can be made about corporate stocks, although the data here fluctuate more widely. The reason for this behavior of the corporate securities data is, of course, that for a considerable period of time corporations as a whole have been providing the great bulk of their financing from retained earnings and other internal sources of funds. In 1963, for example, the undistributed profits of corporations amounted to \$8.7 billion and corporate capital consumption allowances aggregated \$31.8 billion, for a total of \$40.5 billion of internal sources of funds.¹ At the same time, plant and

¹*Economic Indicators* (Prepared for the Joint Economic Committee by the Council of Economic Advisers), Dec., 1964, p. 7.

Table 1. *Sources and Uses of Funds in the United States Money and Capital Markets, 1947-1964 (in billions of dollars)*

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964 ^e
<i>sources of funds</i>																		
life insurance com- panies	3.0	3.4	3.6	3.7	3.7	4.4	4.7	5.0	5.3	5.0	4.7	4.9	4.9	5.1	5.2	5.7	5.9	7.1
savings and loan ass'ns	1.4	1.2	1.3	2.1	2.0	3.1	3.7	4.2	5.7	4.9	4.9	6.3	8.3	7.1	9.3	10.2	12.9	10.9
mutual savings banks	0.9	1.0	1.0	1.0	0.8	1.7	1.8	2.0	2.1	2.0	1.7	2.4	1.5	1.5	2.2	3.3	3.6	4.4
non-insured pension funds †	0.6	0.7	0.7	0.9	1.3	1.5	1.7	1.9	1.9	2.6	3.0	3.2	3.6	3.8	3.8	4.0	4.2	4.5
commercial banks	2.3	-1.7	6.1	6.6	6.0	9.1	4.1	10.2	4.8	4.4	5.1	15.2	4.2	9.2	16.1	18.9	18.7	20.5
federal reserve banks	-0.8	0.8	-4.4	1.9	3.0	0.9	1.2	-1.0	-0.1	0.1	-0.7	2.1	0.3	0.7	1.5	1.9	2.8	3.5
state and local funds U. S. investment accounts	1.1	1.0	1.0	1.5	1.5	2.2	2.5	2.9	2.1	2.2	2.1	1.9	3.1	3.3	2.5	2.5	2.9	2.6
federal loan agencies	3.4	3.0	2.0	-0.1	3.1	3.6	2.4	1.3	2.1	2.3	1.2	-0.9	-0.7	1.4	-0.6	1.0	2.4	2.6
	-0.1	0.1	0.4	0.4	0.9	0.9	0.2	-0.1	0.6	0.9	1.6	0.6	2.5	1.5	1.0	0.9	-0.6	0.5
corporations	2.0	3.6	3.0	8.0	2.9	2.7	2.4	0.5	11.7	-1.2	1.8	3.7	10.9	1.2	2.9	6.4	7.5	6.5
fire and casualty cos.	0.8	1.0	1.1	0.8	0.7	1.2	1.3	1.1	0.9	0.5	0.7	0.8	1.5	1.1	1.3	1.2	1.3	1.5
foreigners	0.4	-0.1	0.1	1.5	*	1.0	0.6	0.6	1.3	0.5	*	*	4.5	1.0	0.6	2.2	0.9	0.7
individuals and others	3.6	4.3	3.1	1.8	1.7	4.8	5.1	1.5	7.7	7.8	7.3	2.0	12.3	1.3	3.0	4.6	5.9	12.3
<i>total sources</i>	18.7	18.1	18.9	30.0	27.8	36.9	31.9	30.0	46.1	32.1	33.4	42.2	57.0	38.3	48.7	62.8	68.3	77.7
<i>uses of funds</i>																		
corporate bonds	3.0	4.7	3.3	2.0	3.6	4.9	4.8	3.8	4.2	4.7	7.1	5.9	4.1	5.0	5.2	4.9	5.6	6.6
corporate stocks	1.2	1.1	1.3	1.5	2.3	2.4	1.9	1.8	1.9	2.5	2.7	2.1	2.4	1.7	2.6	0.7	-0.2	1.4
state and local gov't issues	1.4	2.2	2.3	3.1	2.4	3.1	3.5	4.2	3.5	3.3	4.8	5.7	4.7	3.9	5.2	5.6	7.0	6.2
U. S. government issues	-2.5	-4.1	4.3	-0.4	2.7	8.0	7.8	3.5	2.0	-4.1	-1.7	8.0	7.9	-0.6	6.1	7.5	6.1	8.7
federal agency issues	0.1	0.3	-0.1	0.4	0.2	*	*	*	1.5	0.6	2.1	-0.5	2.2	0.1	0.7	1.6	1.6	0.4
mortgages: 1-4 family other	5.2	5.1	4.3	7.6	6.5	6.8	7.6	9.6	12.6	10.8	8.6	10.1	13.2	10.4	11.8	13.4	15.7	15.7
	2.0	2.2	2.1	2.6	2.9	2.3	2.3	2.8	3.6	3.8	3.5	5.2	5.8	5.6	7.7	11.9	13.6	14.8
business credit	5.7	2.3	-2.5	8.1	5.2	2.9	-1.8	1.4	9.5	7.4	3.1	2.9	8.4	5.5	4.5	8.3	9.2	12.2
consumer credit	3.2	2.8	2.9	4.1	1.2	4.8	3.9	1.1	6.4	3.5	2.6	0.2	6.2	4.5	1.6	5.5	6.7	6.9
all other credit	-0.5	1.7	1.0	1.1	0.7	1.6	1.9	1.9	0.9	-0.4	0.5	2.7	2.1	2.2	3.3	3.6	3.0	4.8
<i>total uses</i>	18.7	18.1	18.9	30.0	27.8	36.9	31.9	30.0	46.1	32.1	33.4	42.2	57.0	38.3	48.7	62.8	68.3	77.7

* \$50 million or less.

^e Estimated.

† For 1948-1955 data are for corporate pension funds only.

Note: The uses of funds measure the net changes in outstanding loans and securities, and the sources the net changes in ownership. Because of rounding, components may not add to totals shown.

Source: Compiled by the Economic Research Staff of the Life Insurance Association of America from a variety of governmental and trade association sources. Most of the data are available in the *Federal Reserve Bulletin*, *Survey of Current Business*, *Treasury Bulletin*, and releases of the Securities and Exchange Commission.

Table 2. *Inflow of Investment Funds, Quarterly, 1961-1964, Reporting Life Insurance Companies (in millions of dollars)*

period		sources of funds							total investment funds
		net change in:			mortgages (total)	securities (total)	sales of real estate	all other	
		ledger assets	cash position *	policy loans *					
1961	I	842	-70	-105	567	340	6	26	1,607
	II	846	-40	-107	589	522	9	13	1,832
	III	884	-58	-87	614	423	4	13	1,792
	IV	1,032	104	-82	665	421	9	14	2,165
	annual total	3,604	-64	-381	2,435	1,706	28	67	7,395
1962	I	928	-360	-89	652	378	11	18	1,537
	II	906	83	-114	662	430	11	28	2,006
	III	996	-171	-91	686	558	9	5	1,994
	IV	1,141	308	-81	719	573	8	17	2,685
	annual total	3,971	-140	-375	2,719	1,940	40	68	8,222
1963	I	942	-108	-83	697	675	7	26	2,156
	II	906	31	-94	732	716	15	21	2,328
	III	1,048	-164	-85	777	573	4	14	2,167
	IV	1,191	243	-81	770	793	7	13	2,936
	annual total	4,087	1	-344	2,977	2,758	34	74	9,586
1964	I	984	-4	-90	740	458	8	20	2,115
	II	1,015	150	-108	746	640	8	24	2,475
	III	1,091	-55	-92	811	741	5	7	2,508
	IV ^e	1,237	269	-93	789	716	5	8	2,931
	annual total ^e	4,327	360	-383	3,087	2,555	26	58	10,029

^e Estimated by reporting companies.

* An increase in cash position or policy loans is shown as a negative, and a decrease is shown as a positive.

Note: Because of rounding, components may not add to totals shown.

Source: Compiled by Economic Research Staff of the Life Insurance Association of America from reports made by life insurance companies accounting for 61-62 per cent of the assets of all United States life insurance companies.

equipment expenditures by business and industry in 1963 amounted to slightly more than \$39 billion. Although these two sets of figures are not strictly comparable, they do serve to illustrate the large degree to which corporate capital expenditures are financed from internal sources. Thus, despite a great expansion in corporate activity since World War II, the volume of external financing has shown little tendency to increase. However, there continue to be many corporations—e.g., the public utilities—which draw heavily upon the capital market.

As might be expected, the use of capital funds by state and local government units has shown a rising trend as the national economy has expanded and the need for schools, highways, bridges, and other public improvements has increased. The item "U. S. Government issues" measures, of course, the net increase or decrease each year in the outstanding federal debt. "Federal agency issues" include those issued by such agencies as the Federal National Mortgage Association, the Federal Land Banks, the Banks for Cooperatives, the Federal Home Loan Banks, and the TVA. Funds raised by these agencies are employed to facilitate the functioning of the home mortgage market or to provide financing at subsidized interest rates to farmers and to special projects such as rural electrification.

As is apparent in Table 1, the lion's share of long-term capital funds goes to the mortgage market. The net increase in mortgage debt each year on one-to-four family residential properties has shown a marked upward trend during the postwar period, although during much of the period it was subject to cyclical changes. The figures cover all types of government-insured as well as "conventional" mortgages on both new and existing construction. They also cover loans to finance improvements on existing homes. The rising trend in the data is accounted for in no small measure by increasing construction costs as well as by upgrading in the quality of housing as living standards have risen. It is also accounted for in part by the fact that the American public is mortgaging properties to an increasing extent to finance the purchase of consumer durable goods or to defray the cost of education.

The rising trend in the net increase in "other" mortgage debt—particularly during the past decade—has been one of the most interesting developments in the capital markets. This item includes mortgages on various types of "income-producing" properties. A large proportion of this category of mortgages in the past several years has been on

apartment buildings, but the item also covers the financing of a wide variety of commercial properties such as office buildings, department stores, shopping centers, warehouses, nursing homes, medical facilities, and so forth. It also includes indebtedness for the financing of industrial concerns, particularly small firms whose credit is not well enough established to obtain funds without the pledging of physical properties.

The item "business credit" is largely self-explanatory. It covers the net increase in credit supplied by the commercial banks to business and industrial firms, as well as the net increase in "trade credit" extended by business concerns to one another. The magnitude of these component parts is shown in Table 3, which will be reviewed presently. The figures for consumer credit include, of course, the net increase each year in such credit as that extended by commercial banks, sales finance companies, and other types of lenders to consumers. "All other credit" includes the net increase in policy loans by life insurance companies, the net increase in loans on securities advanced by the commercial banks, and the increase in various other forms of credit.

The Individual Sources of Funds

The upper panel of Table 1 presents the various sources of funds which have served to satisfy the uses set forth in the table. As indicated earlier, the data for life insurance companies measure the net increase each year in the invested assets (within the U. S. economy) of such companies. The funds which have permitted the increase in invested assets are essentially the annual personal saving through life insurance. This saving arises as the result of reserves which are built up on life insurance policies and insured pensions. The net available funds from life insurance companies exhibited little growth during the 1950's, but in the past four years the vigorous growth of earlier decades has seemed to be reasserting itself.² The forces behind this behavior are too complex to discuss here, but in general it is clear that the economic climate of the fifties, with the fear of "creeping inflation" so much in the public's mind, militated against the sale of cash-value life insurance, whereas the economic climate of the past few years, with the

² For data on the growth of saving through life insurance during the period 1897-1949, see Raymond W. Goldsmith, *A Study of Saving in the United States* (Princeton, 1955) I, 449.

subsidence of the fear of inflation, has been much more favorable to the sale of such insurance.

Table 1 shows the phenomenal growth of savings and loan associations as a source of capital funds. In some years their funds from the net increase in savings and loan shares were augmented or decreased by an expansion or contraction of borrowing from the Federal Home Loan Banks. The rapid growth of the savings and loan industry was probably inevitable in the postwar period, characterized as it was by a great expansion in residential construction and home mortgage financing. By virtue of their ability as local institutions to commit quickly on high loan-to-value conventional mortgages and their ability to pay comparatively high rates of return on shares because their mortgages were made at relatively high interest rates, the savings and loan associations were able to outstrip other savings institutions in their growth.

Funds available from the mutual savings banks have grown less rapidly until the past few years. They have improved their deposit position recently by aggressively bidding for funds with high deposit rates and various promotion measures. One of the most interesting developments in the capital markets during the past fifteen years has been the marked growth of non-insured pension funds, as shown in Table 1. These are the pension funds administered by banks and other corporate trustees. The main reasons the non-insured pension funds have grown so sharply, as compared with pension funds administered by life insurance companies, are as follows: (1) the corporate pension funds have long had the right to invest an unlimited amount in equities, whereas the life insurance companies have been severely restricted until recently in their power to invest pension funds in equities; and (2) the burden of taxation on the uninsured plans was until recently considerably less than on plans administered by life insurance companies. With more equitable tax treatment as between the two types of plans, and with the development of "separate funds" in which the life companies may have 100 per cent of the reserves invested in common stocks, it is possible that a larger proportion of the pension-fund business will be placed with insurance companies in the future.

It is evident from Table 1 that the commercial banks are always a highly important source of loanable funds. The amount of funds made available in the money and capital markets by the commercial banks tends to fluctuate cyclically, as shown in Table 1, and is, of course, the

product of Federal Reserve policy. It is interesting to observe how important the commercial banks have been as a source of funds during the past five years. Since mid-1960 the monetary authorities have pursued an easy-credit policy, and as a result there has been a great expansion of commercial bank loans and investments. With the amendment of Regulation Q in early 1962, permitting the commercial banks to pay considerably higher rates of return on their savings and time deposits, which led to a sharp expansion in such deposits, the banks have directed a much higher proportion of their funds into long-term loans and investments. Thus, during the past three years the expansion of bank credit under conditions of slack in the utilization of our resources has made the commercial banking system the largest supplier of long-term capital funds, without provoking serious inflationary pressures. The data in Table 1 for Federal Reserve Banks measure the net increase or decrease each year in their holdings of U. S. Government securities as the result of open-market purchases or sales. This item is more important, of course, than the data suggest because it is largely through open-market purchases of government securities that the Federal Reserve supplies reserves to the commercial banking system.

The item "state and local funds" measures the net increase each year in the invested assets of pension funds administered by state and local government units. These are, of course, the pension funds established for state and local government employees of all types—schoolteachers, policemen, firemen, and so forth. As is evident in Table 1, these funds have shown considerable growth over the years. The item "U. S. investment accounts" covers such accounts as the Old Age and Survivors' Disability and Insurance Fund, the Railroad Retirement Fund, and the Unemployment Insurance Fund. The "federal loan agencies" item covers, of course, the net increase in loans and invested assets of such federal agencies as the Federal National Mortgage Association, the Federal Home Loan Banks, the Federal Land Banks, the Veterans Administration, and the Rural Electrification Administration.

As is apparent in Table 1, corporations are themselves an important source of loanable funds. They are a significant purchaser of short-term government securities and are active in extending consumer credit and trade credit to other firms. The availability of loanable funds from corporations has been highly correlated with the general business cycle. Fire and casualty companies have been a steady, but compara-

tively minor supplier of funds to the money and capital markets. The item "foreigners" in Table 1 represents, of course, the net increase each year in holdings by foreigners of bonds and stocks issued by American corporations, bonds issued by the U. S. Government or by state and local government units, and mortgages on properties in the United States. Finally, the item "individuals and others" includes not only individual persons but also unincorporated business concerns. It also includes a number of other lending and investing institutions such as investment companies and co-operatives. Any statistical discrepancy would, of course, be reflected in this item.

A Cross Section of Sources and Uses

Table 3 will aid in providing additional perspective on the sources and uses of funds in the United States. Covering the year 1963, it presents for each specific source of funds the various uses to which the funds were put. Stated in another way, it provides for each type of source of funds the net increase in holdings of specific assets—corporate bonds and stocks, state and local government issues, and so forth. This "cross-section" table of the money and capital markets is available for each of the years covered in Table 1.

The data in Table 3 are characteristic of the money and capital markets in recent years. As is apparent, the principal suppliers of funds to the corporate bond market are the life insurance companies, the non-insured pension funds, and the state and local funds. The dominant investors in stocks in 1963 were the non-insured pension funds, although in earlier years individuals would have been an important factor. The principal investors in state and local government issues are the commercial banks, the fire and casualty companies, and individuals. In 1963 the main purchasers of U. S. Government issues were the Federal Reserve Banks, state and local funds, U. S. investment accounts, and "individuals and others." The commercial banks decreased their holdings of U. S. Governments in 1963, but in many earlier years they were substantial net purchasers of Governments. As is evident in Table 3, the commercial banks provided a large part of the market for federal agency issues, most of which were short-term obligations.

Table 3 shows that the dominant investors in mortgages on one-to-four family residential properties are the savings and loan associations. However, the life insurance companies, the mutual savings banks, and

Table 3. Sources and Uses of Funds in the United States Money and Capital Markets in 1963 (in billions of dollars)

sources of funds	securities					mortgages			loans and credit			total sources of funds
	corp. bonds	corp. stocks	state & local	fed. gov't	fed. agency	1-4 family		other	business credit	consumer credit	all other	
savings institutions:												
life insurance companies	3.4	2.5	-0.3	0.3	0.1	13.4	6.5		*	-	0.5	26.6
savings and loan ass'ns	2.1	0.2	-0.2	-0.4	*	0.9	2.7		*	-	0.4	5.9
mutual savings banks	-	-	-	0.9	*	9.6	2.4		-	-	-	12.9
noninsured pension funds	-0.2	0.1	-0.1	-0.3	0.1	2.6	1.3		-	-	0.1	3.6
	1.5	2.2	-	0.1	*	0.3	-		-	-	-	4.2
banking system:												
commercial banks	*	-	5.0	-0.2	0.8	2.8	2.1		5.5	3.0	2.5	21.5
federal reserve banks	*	-	5.0	-3.0	0.8	2.8	2.1		5.5	3.0	2.5	18.7
	-	-	-	2.8	-	-	-		-	-	-	2.8
government institutions:												
state and local funds	1.6	-	-0.1	3.7	*	-0.8	0.2		-	-	-	4.6
U. S. investment accounts	1.6	-	-0.4	1.3	*	0.4	-		-	-	-	2.9
federal loan agencies	-	-	-	2.4	*	-	-		-	-	-	2.4
	-	-	0.3	0.1	*	-1.2	0.2		-	-	-	-0.6
all other investors:												
corporations	0.6	-2.7	2.4	2.3	0.6	0.3	4.8		3.7	3.7	-	15.6
fire and casualty cos.	-	-	*	0.4	0.2	0.8	-		3.7	2.4	-	7.5
foreigners	0.1	0.3	0.8	0.1	*	-	*		-	-	-	1.3
individuals and others	*	0.2	-	0.7	-	-	-		-	-	-	0.9
	0.5	-3.2	1.6	1.1	0.3	-0.5	4.8		-	1.3	-	5.9
total uses of funds	5.6	-0.2	7.0	6.1	1.6	15.7	13.6		9.2	6.7	3.0	68.3

* \$50 million or less.

Note: Because of rounding, components may not add to totals shown.

Source: See Table 1.

the commercial banks have always been important suppliers of home mortgage credit. These same institutions also dominate the market for mortgages on income-producing properties, although in 1963 the increase in holdings of such mortgages by "individuals and others" was very high, as it is in many years. As further shown in Table 3, the great bulk of the market for business credit and consumer credit is supplied by the commercial banks and corporations.

The Private Nature of the Money and Capital Markets

Against the background of the foregoing review of sources and uses of funds, it will be helpful to consider some of the important general characteristics of and trends in the American money and capital markets. Perhaps the most significant characteristic, from the standpoint of comparison with the Soviet, is the fact that the great bulk of both the uses and sources of funds is *private* in origin. The bond issues of state and local government units, of the Federal Government, and of federal agencies are public in nature, but the funds are raised under market conditions. In 1963, for example, the issues of these public agencies aggregated \$14.7 billion out of total uses of \$68.1 billion. Public sources of funds are the Federal Reserve Banks, the state and local funds, U. S. investment accounts, and the federal loan agencies. All of these agencies, with the exception of the Federal Reserve Banks, derive their funds largely from private sources—that is, from personal and business saving and from the commercial banking system. In 1963 the aggregate of such sources amounted to \$7.5 billion out of total sources of \$68.1 billion. Actually, this division of private and public sources and uses of funds is rather meaningless because nearly all of the sources and uses of money and capital funds flow through the market system. There is very little direct connection between a public source of funds and a public use. Perhaps the clearest case is the investment in government securities of funds accumulated in U. S. investment accounts, such as OASDI. In earlier days the funds accumulated by a city may have been invested in the bonds of that city, but today such funds are being directed into other investments—corporate bonds, mortgages, and other securities—which earn a higher rate of return.³

As we shall see later, the biggest part of the financing of capital

³ See, for example, *Investment Progress, a Report by Abraham D. Beame, Comptroller of the City of New York, on the Investment of Funds of the New York City Retirement Systems*, Nov., 1964.

expenditures in Soviet Russia is handled through the all-union budget. In contrast, only a small portion of federal expenditures in the United States is for capital goods. The available analyses of federal expenditures are not well suited to distinguishing between those of a capital goods nature and those for current operations. However, the federal budget does provide a breakdown of "investment expenditures" in the administrative budget and in the trust funds expenditures.⁴ Table 4 provides a summary of investment, operating, and other expenditures in the administrative budget and in the trust funds for fiscal 1965. The "investment" items are "additions to federal assets," "additions to state, local, and private assets," and "developmental expenditures." For our purposes it seems appropriate to include only the expenditures of a "civil" character, although undoubtedly some portion of the "national defense" expenditures of an investment nature should be included. As shown in the table, the grand total of expenditures in the administrative budget in fiscal 1965 amounted to \$97.9 billion, and the grand total of trust fund expenditures to \$29.4 billion, for an over-all aggregate of \$127.3 billion. Of this aggregate, there was \$3,666 million of expenditures in the combined administrative budget and trust funds for "additions to federal assets" in the "civil" category. The items included in this category will be detailed presently. Also out of this aggregate there was \$5,265 million for "additions to State, local, and private assets" in the "civil" category. Finally, "developmental expenditures" in the civil category amounted to \$7,911 million. Thus this analysis shows that out of aggregate federal expenditures of \$127.3 billion in the administrative budget and in the trust funds in fiscal 1965, a total of \$16,842 million or about 13 per cent may be described as investment expenditures in the "civil" area of the economy.

What are included in these categories of investment expenditures? The "additions to federal assets" include administrative budget expenditures for direct loans, such as loans to finance private housing construction and to encourage home ownership, to help small business, to finance college dormitory construction, to aid farm ownership and operation, to finance rural electric and telephone systems, and to promote economic development abroad.⁵ Most of these expenditures

⁴ See *The Budget of the United States Government, Fiscal Year Ending June 30, 1965* (Washington: U. S. Government Printing Office, 1965), pp. 352-370.

⁵ The latter item probably should be excluded from the total because it consists of loans to promote economic development abroad. The amount was \$401 million in fiscal 1965.

Table 4. Summary of Federal Investment, Operating, and Other Expenditures (in millions of dollars)

description	administrative budget funds			trust funds		
	1963 actual	1964 estimate	1965 estimate	1963 actual	1964 estimate	1965 estimate
<i>additions to federal assets:</i>						
civil	5,060	3,555	3,090	-250	362	576
national defense	17,947	18,734	17,239	-	-	-
<i>additions to state, local, and private assets:</i>						
civil	1,312	1,686	1,683	3,481	4,833	3,582
national defense	28	28	22	*	2	1
<i>developmental expenditures:</i>						
civil	4,772	6,840	7,837	54	68	74
national defense	7,886	8,597	8,252	-	-	-
<i>subtotal, investment and developmental type expenditures:</i>						
civil	11,144	12,082	12,610	3,285	5,263	4,232
national defense	25,861	27,359	25,513	*	2	1
<i>current expenses for aids and special services:</i>						
civil	16,109	17,311	16,354	661	816	792
national defense	1,751	1,617	1,265	674	860	1,225
retirement and social insurance benefits—civil	-	-	-	20,814	21,409	22,330
<i>other services and current operating expenses:</i>						
civil:						
interest	9,980	10,701	11,101	-	-	-
other	3,167	3,449	3,360	151	153	104
national defense	25,142	26,323	27,201	5	5	5
District of Columbia, deposit funds, and other unclassified items	-	-	-	1,461	1,294	1,160
allowances and contingencies	-	250	1,094	-	-	-
interfund transactions	-513	-685	-600	-505	-488	-477
<i>grand total</i>	92,642	98,405	97,900	26,545	29,315	29,372

* Less than one-half million dollars.

Source: Budget of the United States Government for the Fiscal Year Ending June 30, 1965 (Washington, 1964), p. 353.

are included in the budget total on a net basis—that is, gross disbursements less receipts. This category also includes financial investments in certain international organizations and mixed ownership

enterprises,⁶ and expenditures for public works, for changes in major commodity inventories, for major equipment, and for the acquisition and improvement of real property and other physical assets. Trust fund expenditures in this category consist primarily of mortgage purchases (net of sales) by the Federal National Mortgage Association in support of its secondary mortgage market operations, and net loans by two government-sponsored enterprises—Banks for Cooperatives and the Federal Intermediate Credit Banks.

Federal grants-in-aid which add to the physical assets of state and local governments are primarily for the construction of highways (mainly through the highway trust fund), hospitals, airports, waste-treatment works, watershed protection projects, schools in federally affected areas, and public facilities under the area redevelopment program and the temporary accelerated public works program. Federal expenditures which increase the value of privately owned assets are largely for the conservation and improvement of private farm land and water, for grants to states for the building of private hospitals and other health facilities, and for construction subsidies to the merchant fleet. Trust fund expenditures in this category ("additions to state, local, and private assets"), in addition to the highway program, include the net loans made by the Federal Land Banks and the Federal Home Loan Banks. These loans presumably strengthen lending institutions which promote farming and individual home ownership. As we have seen earlier, many of the institutions such as FNMA, the Federal Land Banks, and the Federal Home Loan Banks raise much of their funds by means of sale of their securities in the money and capital markets, but their net increase in loans appears as a federal budget item in the total expenditures.

Finally, the category "developmental expenditures" in Table 4 includes principally federal expenditures for research and development, education and health, and other programs which increase the nation's fund of knowledge and technical skills and improve the physical vigor of the population. The total of federal spending shown in this category does not fully reflect the government's contribution to the productivity of the economy, since it excludes certain other programs which further this end. Thus, veterans' educational benefits are listed as veterans' aids rather than as developmental outlays.

⁶The investments in international organizations should also probably be excluded. They amounted to \$182 million in fiscal 1965.

In summary, then, about \$16.8 billion of federal expenditures, or 13 per cent of the total of administrative budget and trust fund expenditures, are of a "civil" investment nature. In addition, an unknown amount of defense expenditures of an "investment" character, as shown in Table 4, undoubtedly ultimately have an effect on the civilian economy. Beyond this, the state and local government units have large expenditures of an "investment" nature. For example, in 1962 these levels of government had total expenditures of \$59.7 billion, of which \$21.9 billion was for education, \$10.3 billion for highways, \$5.1 billion for public welfare, and \$22.4 billion for "all other" expenditures.⁷ There is no available breakdown of these expenditures between "investment" and "current operating" expenditures. Moreover, there is a certain amount of double-counting in that federal grants-in-aid have made state and local government expenditures possible for highways, schools, hospitals, and other capital facilities. In 1962, for example, the total revenues received by state and local government units from the Federal Government amounted to \$7.9 billion. Moreover, as we have seen earlier, the state and local government units are large borrowers of funds from private sources, and it seems likely that the bulk of these borrowed funds are used for the construction of capital facilities such as schools, roads, bridges, and so forth. Thus, even on the broadest definition of capital expenditures, including the costs of education, it is true that the largest part of the capital expenditures in the United States are private in their origin, both from the standpoint of the actual expenditures and the sources of funds financing such expenditures.

The Influence of Market Forces on the Money and Capital Markets

A second characteristic of the financing of capital formation in the United States, which should be stressed to provide a basis for contrast with the Soviet, is the high degree to which it is governed by private market forces. The allocation of money and capital funds in the American economy is determined for the most part, of course, by free market forces. Almost without exception the lending institutions seek aggressively to earn the highest possible interest return—in line with the risk involved—on the loans and investments they make. Competition among and between these institutions—commercial banks, savings banks, savings and loan associations, life insurance companies

⁷ *Economic Report of the President* (Washington, 1964), p. 280, Table C-62.

—is extremely keen to earn the highest possible return on their loans and investments in order to be able to pay the highest return to depositors, shareholders, or policyholders. On the other hand, the various users of capital funds—individuals, business firms, governmental units—bid for the available funds. In the case of business firms, of course, the interest costs are measured against the expected rate of return on capital. Underlying the expected rate of return are consumer preferences and the system of priorities arising out of free consumer choices. The use of loanable funds by individuals for the financing of housing or consumer durables is also based on an order of priorities. Although they are certainly far from being free of imperfections, the American money and capital markets do an effective job of allocating resources to the highest priority uses in the various capital goods sectors. We may question whether the American public has the best set of priorities—e.g., whether they are casting too many of their dollar votes for multiple taillights and not enough for education—but given the choices which the American people are making, the money and capital markets perform effectively to allocate resources to the highest priority uses. Investing institutions are highly sensitive to interest rate variations and are alert to move funds to the uses paying the most attractive returns—presumably the highest priority uses from the standpoint of consumer preferences.

It is assumed, of course, that interest rates are permitted to move freely in response to changing market forces. This is not, of course, entirely true. The Federal Government, by means of monetary and debt management policy, can and does exert a powerful influence upon the general level of interest rates, but within this general level there are significant variations as between particular rates. However, it is probably true that the money and capital markets operated more effectively as an allocator of resources in the period 1951–1960, during which interest rates were permitted a very large amount of freedom to reflect market forces, than was true in the period 1946–1950 or 1961–1964, when interest rates were more under government control.

The Increasing Competition between Lending Institutions

One of the significant trends in the U. S. money and capital markets, which tends to make these markets a much more efficient allocator of

funds, is the sharply increasing degree of competition among lending institutions. This increasing competition has several different aspects. Generally the loans and investments of the institutions functioning in the money and capital markets are governed by three forces: (1) statutory requirements either at the state or federal level; (2) regulation, again at either the state or federal level; and (3) tradition. Examples of statutory requirements would include the following: (1) in most states the life insurance companies chartered therein are permitted to hold no more than 3-5 per cent of their assets in common stocks; (2) the percentage of assets held by life insurance companies in the form of conventional mortgages is restricted to a figure such as 50 per cent; (3) savings and loan associations have been generally restricted in their investments to mortgages on residential properties located within a limited geographical radius of the office of the association; (4) a similar geographical limitation has applied to mortgage loans by mutual savings banks; (5) the ability of commercial banks to invest in bonds and mortgages has been restricted in terms of a given ratio to time and savings deposits; and (6) the investments in bonds by mutual savings banks have been limited to those on certain "legal lists." Countless other types of statutory limitations could be cited, but the foregoing will suffice.

Some examples of regulation affecting the loans and investments of the lending institutions are as follows: (1) common-stock holdings of life insurance companies must, under regulations of the National Association of Insurance Commissioners, be valued in annual statements at year-end market price, a requirement which has militated against common-stock investment because in many states there are also narrow limits placed upon the amount of surplus which a mutual life insurance company may have; (2) the ability of a savings and loan association to borrow from a Federal Home Loan Bank is regulated according to the percentage of its loans which may be delinquent or in foreclosure; and (3) the regulatory authorities have discretionary authority in the case of commercial banks to govern branching or mergers.

Some illustrations of the force of tradition in governing loans and investments of institutions are the following: (1) until quite recently the corporate pension funds traditionally invested only in corporate bonds and stocks and not in mortgages; (2) until comparatively recently the life insurance companies traditionally did not, generally

speaking, purchase foreign securities, with the exception of Canadian securities; and (3) until comparatively recently it was traditional for state and local government funds to limit their investments to U. S. Government securities, municipal bonds, and high-grade corporate bonds.

The effect of these various types of restrictions—statute, regulation, and tradition—was to divide the money and capital markets into water-tight compartmentalized pools. The result, of course, was an imperfect over-all money and capital market and a less efficient system for the allocation of funds. Since the end of World War II, however, there has been a continuous process in which by change of statute, regulation, and custom the water-tight compartments have been breaking down and the money and capital markets have been becoming much more competitive. Many examples of the process can be cited. In the corporate bond market competition has been intensified by the breaking down of the compartmentalization in which the direct or private placement market was largely the preserve of the major life insurance companies and the market for publicly offered corporate bonds the area of investment by other life insurance companies, the non-insured pension funds, and state and local funds. During the past decade the non-insured pension funds and some of the larger state and local funds have been competing to an increasing degree in the direct placement market, and intermediate-sized and smaller life insurance companies have also become active in that market. Moreover, the term loans of the commercial banks have developed as a competitive device with the direct placement market. In the early years after the war it was uncommon for smaller business firms to sell their bonds in the direct placement market, and many had great difficulty in raising funds in the public market. One of the interesting developments in the past decade has been the increasing use of direct placement as a means of providing financing to small and relatively young business corporations.

In the one-to-four family residential mortgage market an outstanding example of the breaking down in the compartmentalization of funds has been the increasing tendency for non-insured pension funds, state and local funds, and union welfare funds to invest in home mortgages. So far the impact has not been large because of the dominant position of the savings and loan associations in this market, but the development is a significant one. During the past several years, also, the commercial banks have intensified their competitive efforts in the

conventional residential mortgage market. The market for mortgages on income-producing properties a decade ago was dominated by the life insurance companies. In recent years the commercial banks, the non-insured pension funds, the savings and loan associations, and the mutual savings banks have greatly increased their activity in this sector of the mortgage market. Here again, an important trend has been the greatly increased extent to which mortgages are being employed as a means of financing small business concerns.

Many statutory amendments made during the past fifteen years have expanded the investment powers of the various lending institutions. For example, life insurance companies have received greater statutory authority to purchase equities, foreign bonds, and newer types of investment instruments such as oil production loans. Increased statutory power for lending institutions to participate in mortgage loans has also broadened the scope of the mortgage market. Other measures have broadened the home mortgage market. Through the device of federal guaranty or insurance of home mortgage loans the residential mortgage market has become much more national and less local in scope. The liquidity of the home mortgage market has been greatly enhanced by the operations of FNMA and by the increasing use of mortgage warehousing with the commercial banking system.

There are undoubtedly many more changes ahead which will serve further to break down the compartmentalization of the money and capital markets. The mutual savings banks are seeking the right to have federal charters, one main purpose of which is to increase their investment powers both in terms of the outlets into which their funds may be invested and the geographical latitude of their conventional mortgage lending operations. Similarly, the savings and loan associations are seeking statutory amendments to broaden their investment powers even further and to permit them to go into such areas as consumer installment loans.

The Trend Toward Greater Risk-Taking

Thus it is evident that since World War II many forces have greatly increased competition in the money and capital markets. During the same period there has been another highly important trend, namely, a greater willingness on the part of institutional investors to make loans and investments which in earlier times would have been regarded as

too risky. In part this is a product of the rising competition in the money and capital markets—sharper competitive conditions are forcing institutions to assume larger risks. More importantly, however, it is the product of the fact that during the postwar period we have enjoyed a long upswing in general business activity in which cyclical downturns have been very modest. The period has also been characterized by an upward creep of the general price level. Against the background of this record of the past, and cognizant of the fact that the economic objectives of full employment and faster economic growth are accepted by both political parties, financial institutions have been encouraged to believe that they can with safety assume greater risks in their lending and investing. It is safe to say that the tremendous expansion in the direct placement of corporate bonds and in the real estate mortgage market could not have occurred unless lending institutions had been willing to appraise the degree of risk in a loan or investment and to make the riskier ones at commensurately higher interest rates. The result is that during the past fifteen years there has been a significant change in the degree of risk which one finds in the investment portfolios of all of the financial institutions. A much lower proportion of their holdings are the riskless assets and a much higher proportion are assets bearing a considerably larger degree of risk—for which the institutions are presumably being paid a commensurate rate of return. One clear evidence of this trend may be found in changes which have occurred since the war in the statutes governing the maximum uninsured or conventional loans which institutions may make on real estate. Fifteen years ago most institutions could not make such a loan in excess of two-thirds of the value of the property. Today, after a continuous amendment process, some of the institutions are permitted by statute to make 90-per cent loans.

The changes which have occurred in the risk preferences of investors, along with the rising tide of competition, have undoubtedly enabled the U. S. money and capital markets to play a vital role in the vigorous growth of the American economy in the postwar period.

The Financing of Capital Formation in the Soviet Union

Any effort to compare or contrast the role of finance in Soviet Russia with that in the United States faces the handicap of unavailability of

detailed information about finance in the Soviet, especially up-to-date information. The broad outlines of the Soviet financial system are, however, well known.

The different role of finance and financial institutions in the Soviet stems, of course, from the Russian planned economy. The proportion of resources to be devoted to the production of various types of capital goods versus consumer goods and services is determined in the plan, and the investment expenditures are merely "the financial reflection of decisions about economic growth and priorities."⁸ Since freedom of choice on the part of consumers, as we know it in the American economy, is virtually absent from the Soviet system, neither free-market forces nor the pricing mechanism functions to allocate resources. Although interest is paid on savings deposits and government bonds, the concept of interest as a price is otherwise meaningless, at least explicitly, in the Soviet Union.

The Soviet Budget as a Means for Allocating Resources

As we saw earlier in this paper, the budget of the U. S. Government is an important means by which resources are directed to the formation of capital. However, the principal instrument for the allocation of resources to capital formation in the United States is the private money and capital market mechanism. In Soviet Russia the all-union budget is the device which in the main determines the employment of resources either for consumption or for the formation of physical capital. The great importance of the Soviet budget in this regard is illustrated by the fact that in 1960 the Soviet national income amounted to 1,440 billion (old) rubles, while the revenues of all public authorities amounted to 752 billion rubles in the same year, or more than 52 per cent of national income.⁹

The principal items of revenue in the Soviet state budget, which includes the revenues of all republics and local authorities, are shown in Table 5 for the years 1940, 1950, and 1958. The "turnover tax" is the main item of revenue, although its importance has been declining slightly in recent years.¹⁰ Actually, the term "turnover tax" covers three distinct kinds of tax. The first is an excise duty, such as the tax on vodka, matches, and salt. The second may be described as "tax by

⁸ Alec Nove, *The Soviet Economy: An Introduction* (New York, 1963), p. 97. Also, see Harry Schwartz, *Russia's Soviet Economy* (2nd ed.; New York, 1954), p. 146.

⁹ Nove, *op. cit.*, p. 97.

¹⁰ For a discussion of the turnover tax, see Schwartz, *op. cit.*, pp. 138-140, 305, and 489-490; Nove, *op. cit.*, pp. 98-100.

difference" and is commonly applied to consumers' goods where there is a large assortment of products, e.g., textiles. The tax is the difference between the retail price (less trade margin) and the wholesale price. The wholesale price is based on average cost plus a small profit margin, and the retail price is set in principle to equate supply and demand for the product. The turnover tax emerges as the difference between these two prices. The third kind of "turnover tax" is in some respects similar to the second. It arises from the acquisition by the state of farm produce at low prices. For example, in 1936 the compulsory procurement price for wheat, plus handling costs, was 15 rubles per ton. This

Table 5. *Principal Revenue Items in the Soviet Budget for Selected Years (billions of rubles)*

	1940	1950	1958
turnover tax	105.9	236.1	304.5
deduction for profits	21.7	40.4	135.4
MTS revenues *	2.0	3.6	9.7
co-operative tax, <i>kolkhoz</i> tax, non-commodity operations tax	3.2	5.5	16.6
state loans	11.4	31.0	10.6
(mass subscription loans)	(9.0)	(26.4)	(3.2)
(savings bank loan purchases)	(0.2)	(3.1)	(6.5)
direct taxes	9.4	35.8	51.9
social insurance revenue	8.6	19.6	33.1
other revenues	18.0	50.8	110.5
<i>total</i>	180.2	422.8	672.3

* Including other specialized agricultural organizations.
Source: Alec Nove, *op. cit.*, p. 98.

wheat was sold to the state milling enterprises for 107 rubles per ton, with the tax amounting to 92 rubles or almost 90 per cent of the wholesale price inclusive of tax. The distinction between the second and third types is that the second falls on the consumer of the product and the third on the peasants who are compelled to deliver grain so cheaply. Revenues from the third type of "turnover tax" have fallen relatively in recent years due to an upward revision in state buying prices.

The "deduction from profits," the second largest item in Table 5, is the state's residual share in enterprise profits.¹¹ As noted above, the

¹¹ Nove, *op. cit.*, p. 100.

wholesale price of a product is based on average cost plus a small profit margin for the enterprise. The item "MTS revenues" refers to revenues realized by the Machine Tractor Stations. These revenues, which are dwindling in importance with the disappearance of the MTS, consist principally of produce received in payment for the MTS services, valued at the compulsory-procurement prices. The taxes on co-operatives are levied on the profits of producers' co-operatives.¹² Since 1960 this form of productive organization has almost completely disappeared. The tax on collective farms is a 14-per cent levy on all costs and value of produce received by such farms.¹³ The "tax on non-commodity operations," abolished in 1958, was levied on the turnover of service enterprises such as municipal laundries, baths, and so forth.

Revenues from state loans are of three types. The first, and for a long time the largest, was the "mass-subscription loan," essentially a compulsory deduction from wages to buy premium bonds.¹⁴ The lottery prize drawings represented first 4 per cent, then 3 per cent, and finally 2 per cent of the total amount subscribed. This form of loan was abandoned in 1958, at which time the lottery prize drawings and repayments on existing bonds were terminated. The second kind of loan revenue is a product of the fact that state savings banks, in which Soviet citizens are encouraged to keep their savings by a 3 per cent deposit return, buy interest-bearing state bonds. The purchases of such bonds by the savings banks each year are roughly equal to the increase in deposits. Thirdly, there are other bond sales, notably to individual citizens on a genuinely voluntary basis. These loans were not defaulted or suspended in 1958.

As shown in Table 5, direct taxes do not play a large role in the Soviet revenue system. There are a number of types of direct tax.¹⁵ First, there is an income tax levied upon all incomes other than those of the *kolkhoz* peasants. These peasants pay an "agricultural tax" on their private holdings of land and livestock. Another type of direct tax is that levied on bachelors and small families. This tax and the income tax are now in process of being discontinued.

"Social insurance revenues" arise from contributions paid by state

¹² *Ibid.*, p. 43.

¹³ *Ibid.*, p. 51.

¹⁴ *Ibid.*, p. 101. See also, *Dimensions of Soviet Economic Power*, Hearings Together With Compilation of Studies Prepared for the Joint Economic Committee, Congress of the United States, 87th Cong., 2nd Sess., Pursuant to Sec. 5(a) of Public Law 304 (79th Cong.), Dec. 10 and 11, 1962, p. 359; see also Schwartz, *op. cit.*, p. 497.

¹⁵ Nove, *op. cit.*, pp. 101-102. See also *Dimensions of Soviet Economic Power*, p. 359.

enterprises to provide insurance for employees. The "miscellaneous taxes and other revenues" include the following: net revenues of the state insurance trust, the timber-cutting levy, stamp duty, automobile registration fees, passport fees, entertainment tax, and so forth.

It will be seen from the foregoing discussion that the great bulk of Soviet revenues is derived from indirect taxes. Given the government's decisions about allocation of resources, the Soviet budget must find revenues to meet state expenditures on fixed investment, defense, education, health, and so forth. Since direct taxes are of minor importance, and voluntary savings can play only a small role, there remains the raising of revenue through the spread between costs and

Table 6. *Principal Expenditure Items in the Soviet Budget for Selected Years (billions of rubles)*

	1940	1950	1958
allocations to the national economy	58.4	157.9	290.3
social-cultural expenditures	40.9	116.7	214.2
defense	56.8	82.8	93.6
administration	6.8	13.9	12.0
loan service	2.8	5.1	3.7
other expenditures	8.6	38.8	28.9
<i>total</i>	174.3	415.2	642.7

Source: Nove, *op. cit.*, p. 104.

final selling prices of goods, so that this in various forms is the greatest part of the income for the state budget.

Table 6 presents the principal expenditures in the Soviet budget in the same years as shown in Table 5. "Allocations to the national economy" represent in the main non-returnable grants to state enterprises and organizations for fixed investment.¹⁶ However, more than a third of the total is spent for such purposes as to provide working capital to state enterprises, to meet losses on housing due to the fact that rents are inadequate to cover running costs and repairs, and for inventory accumulation. "Social-cultural expenditures" include education, health, maternity assistance, social insurance (principally expenditures for sick pay and pensions), and social security.¹⁷ "Defense" is self-explanatory, but since no information about the content of the

¹⁶ Nove, *op. cit.*, p. 105.

¹⁷ *Ibid.*, p. 106.

defense budget is ever provided, it is possible that some defense items may appear elsewhere in the over-all budget, e.g., some military nuclear research may be financed under the science portion of "social-cultural expenditures."¹⁸ The item "administration" covers, of course, the administrative expenses of the local and republican governments, as well as those of the central government. It does not include the police, the expenses of which are buried in "other expenditures."

Expenditures for Fixed Investment

As indicated earlier, budget expenditures for fixed investment constitute about two-thirds of "allocations to the national economy" in Table 6. Since our primary interest in this paper is in fixed invest-

Table 7. *Fixed Investments in the Soviet Union, 1958*
(billions of rubles)

1. as originally planned (state sector)	203.8
financed from budget	(142.7)
financed from enterprise profits	(29.1)
financed from amortization funds	(27.7)
2. actually spent: state "planned" investments	199.1
3. actually spent: state "unplanned" investments	40.4
4. <i>kolkhoz</i> investments, actual	28.2
financed by credits	(4.3)
5. individual investments	<i>not known</i>
financed by housing credits	(3.5)

Source: Nove, *op. cit.*, p. 110.

ments, it will be helpful to review the financing of such investments in greater detail. Table 7 provides a picture of the fixed investments in the Soviet economy in 1958 and the way they were financed. The largest part of fixed investment in the state sector is financed by non-returnable budgetary grants. Beyond this, as is evident in the table, a sizable share is financed from the profits of state enterprises and from their amortization funds. This is reminiscent of the large extent to which American corporations rely upon internally generated sources of capital funds. With minor exceptions the funds arising from enterprise profits and amortization are transferred to specialized investment banks, to be discussed presently, which disburse them for capital expenditures justified by the investment plan.

¹⁸ *Ibid.*, p. 106.

The central investment plan is prepared and submitted to the central government by Gosplan. Investment projects of a value exceeding a certain sum must be approved separately by the central government, whereas those below this sum are approved in the aggregate. Another distinction is that made between "centralized" and "decentralized" investments.¹⁹ The former are those covered by the central investment plan. "Decentralized" investments are financed from sources not included in the plan at all, such as, for example, the enterprise fund, profits of local industry, or "mechanization" credits from the State Bank.

Outside the state sector, fixed investments are financed from profits of producers' co-operatives, from the capital fund of the *kolkhozi*, from private saving—notably for private house-building—and from bank credits to *kolkhozi*, co-operatives, and individuals.²⁰ Co-operatives may borrow up to fifteen years, with interest rates ranging from 1.75 to 2.0 per cent.

The Soviet Financial Institutions

The Soviet has a surprisingly elaborate system of financial institutions. The State Bank (Gosbank) carries out the functions of a central bank—issuing banknotes, keeping the gold reserve, and making international payments—as well as administering tax receipts and paying out of the state's current expenditures.²¹ It also acts as an important part of the economic control mechanism—that is, "control by the ruble." All state enterprises are required to keep their accounts in Gosbank, which is thus able to ascertain that cash resources are employed in accordance with the regulations, to pay wage rates and prices prescribed by the regulations, and to carry out production in conformity with the plan. Gosbank provides short-term credits to enterprises and this also affords an essential control mechanism. Just as in the U. S. economy, the role of short-term credits by the Gosbank is to facilitate the process of payment and to overcome the time gap between payments and receipts. The Gosbank credits provide about 40 per cent of the working capital in the economy. The role of credits is much greater in trade and light industry than it is in heavy industry, in which

¹⁹ *Ibid.*, pp. 108–109.

²⁰ *Ibid.*, p. 110.

²¹ *Ibid.*, p. 111. For a description of the functioning of Gosbank and Stroibank, see also *Dimensions of Soviet Economic Power*, pp. 189–190; Schwartz, *op. cit.*, pp. 508–512.

the enterprises are given greater latitude to provide working capital out of internal sources. Short-term credits carry an interest rate of 2 per cent. The monetary resources of Gosbank come partly from deposits of enterprises, partly from the transfer to it of the bulk surpluses, and partly from budgetary grants, as well as from the retention of a portion of its profits.

Gosbank is not, generally speaking, concerned with the financing of fixed investment. However, it does provide "mechanization credits," i.e., credits of intermediate term to cover the introduction of a new industrial technique, as well as credits to local, commercial, and producers' co-operatives which are used for fixed investment purposes.²²

Among the Soviet financial institutions, as noted earlier, is a network of savings banks in which individuals are encouraged to deposit their savings by the payment of a 3 per cent return on deposits.²³

During the period 1932–1958 there were four banks whose function it was to provide credit for fixed investments: Prombank (industrial bank), Selkhozbank (agricultural bank), Torgbank (trade and co-operatives), and Tsekombank (communal and housing bank). In 1959, however, these four separate banks were eliminated and in their place was created one institution called Stroibank (construction bank), which assumed virtually all of the functions of the defunct investment banks. The main function of Stroibank is to administer investment funds supplied from two principal sources: the state budget and funds derived from the profits and amortization allowances of state enterprises.

These, then, are the main outlines of the Soviet financial system. There are some rather surprising similarities between this system and that of the United States. Examples are the important reliance upon internal financing by enterprise in both systems and the use of the national budget—much less important in the United States than in Russia—as a means of financing capital formation. The differences between the two systems, however, are vast. They are a reflection of the fact that Russia has a planned economy and the United States a market-regulated system for the most part. The absence of a rational price and cost mechanism in the Soviet economy as a whole has its counterpart in the financial system in which the interest rate—the price

²² Nove, *op. cit.*, p. 113.

²³ *Ibid.*, p. 113.

of borrowed funds—is arbitrarily established and plays only a minor role in the allocation of resources.

Comparison of the Record of Physical Capital Formation in the United States and in Soviet Russia

In the light of the foregoing comparison of the functioning of the financial systems of the United States and Soviet Russia, it will be

Table 8. *Relative Shares of Final Uses in "Real" Gross National Product, U.S.S.R. and U.S.A. (per cent)*

	year	household consumption	gross investment	other
U.S.S.R. (in ruble factor cost of 1937)				
	1928	79.5 *	12.5	8.0
	1937	52.5 *	25.9	21.6
	1940	49.4 *	19.1	31.5
	1944	31.8 *	13.1	55.0
	1950	45.7 *	26.9	27.4
	1955	48.0 *	28.1	23.9
U.S.A. (1929 dollars)				
	1869-78 †	74.5	22.7	2.7
	1879-88 †	74.0	21.6	4.3
	1889-98 †	71.4	24.7	3.8
	1899-1908 †	73.1	22.9	4.0
	1929	75.7	20.0	4.3
U.S.A (1954 dollars)				
	1929	70.5	23.8	5.8
	1948	68.0	20.2	11.8
	1957	66.4	19.0	14.6

* Including education and health care privately paid for.

† Averages for decade.

Source: Bergson, *The Real National Income of Soviet Russia since 1928* (Cambridge, Mass., 1961), p. 277, Table 76.

interesting to review the record of capital formation in the two economies over a period of time. Data compiled by Abram Bergson, as shown in Table 8, are useful for this purpose.²⁴ The definition of the final uses of GNP, as employed in the table, are as follows. The category "household consumption," as applied to the U. S. S. R., includes the

²⁴ Abram Bergson, *The Real National Income of Soviet Russia since 1928* (Cambridge, Mass., 1961), p. 277, Table 76. The detailed breakdown of Soviet GNP in rubles (expressed in 1937 prices) is presented on p. 48, and the component parts of GNP are discussed on pp. 48-83.

sum of household purchases in retail markets, housing services, consumption of farm income in kind, military subsistence, and education and health care paid for privately. The same item for the United States, in that part of the table in which the data are expressed in 1954 dollars, represents personal consumption expenditures under the U. S. Department of Commerce concept. The item "gross investment" for the U. S. S. R. includes expenditures for fixed capital—permanent structures such as factories, houses, and other buildings—as well as construction of roads, irrigation works, and the like, purchases of new machinery and equipment, and assembly and installation work.²⁵ It also includes some additional expenditures such as for research associated with a specific investment project, as well as expenditures for "capital repairs," i.e., those involving substantial renovations that are intended to restore an asset to full working life. The remaining items in this component are a miscellany, including investments in inventories, gold production, and net exports. In the United States portion of the table, the concept of "gross investment" employed by Bergson (in the data expressed in 1954 dollars) consists of the Department of Commerce's gross private domestic investment, net exports of goods and services, civilian public construction, and government purchases of civilian producers' durables. "Other" outlays for both countries in the table are calculated as a residual and would include all public outlays on education and health care, defense, and administration. The data shown in the table for the United States which are expressed in 1929 dollars are taken from unpublished data prepared by Simon Kuznets but adjusted somewhat to conform to Bergson's concepts.²⁶

As Bergson points out, aside from the difficulties of obtaining strictly comparable data, certain incongruities are inherent in the data. Most importantly, in both countries household consumption includes household outlays on education and health care, but because of the differences in institutional arrangements, the share of such services privately paid for is very limited in the U. S. S. R. but quite significant in the United States. For this reason, therefore, Soviet household consumption tends to be somewhat understated in relation to the corresponding American category. The relative understatement probably tends to be greater in recent years because Soviet outlays on education and health care have increased sharply over time. Similarly,

²⁵ For a detailed breakdown of the component parts of gross investment in fixed capital in the Soviet, see Bergson, *op. cit.*, p. 77, Table 14.

²⁶ *Ibid.*, p. 278, n. 13.

the comparative data on "other" outlays are subject to a contrary bias, because for both countries this category includes all public outlays on education and health care.

The data in Table 8 illustrate something that is well recognized—that the Soviet planned economy has succeeded in restricting consumer spending to a much lower proportion of aggregate output than the predominantly market-oriented economy of the United States. By the same token, the proportion of GNP devoted to gross investment in the U. S. S. R. has since World War II been appreciably greater than in the United States. There may be a question of whether resources have been allocated more efficiently to capital formation in the Soviet than in the United States, but the fact remains that the Soviet has directed a considerably higher proportion of resources to capital formation, which helps explain the stronger economic growth of the U. S. S. R. It is also interesting to note the much higher proportion of the "other" category of GNP in the Soviet, which reflects not only the much greater share of GNP absorbed by defense but also the much more important role of government spending in the Soviet.

It is unfortunate that there are no figures available for more recent years regarding the proportion of Soviet GNP in household consumption and gross investment. Indications are that a gradual shift is taking place toward a rising proportion of GNP in consumer expenditures, and presumably a lesser proportion in gross investment. As the Soviet system grows, it seems logical that public pressures will require an increasing proportion of resources in the production of consumer goods. Considering the freedom of choice on the part of the American public to spend for consumption or save, along with the limited role of the government in capital formation, it is a tribute to our system that the ratio of gross investment to GNP has been as high as it has been.

One of the interesting and significant differences in capital formation in the U. S. S. R. and the United States is that the fixed investments of the Soviet have been heavily concentrated in projects calculated to have the highest potential toward increasing output—industrial plants and equipment, electric power facilities, and the like.²⁷ On the other hand, Soviet housing has been sorely neglected because of its heavy demands upon resources and its comparatively unproductive nature.²⁸

²⁷ *Dimensions of Soviet Economic Power*, pp. xi–xiii.

²⁸ Abram Bergson and Simon Kuznets, *Economic Trends in the Soviet Union* (Cambridge, Mass., 1963), pp. 267–268: "In the Soviet Union housing has been neglected because of its heavy demands on resources and its 'unproductive' nature, despite the

According to data prepared by Bergson and Kuznets, the amount of urban housing space (square meters per capita) in 1958 was only 95 per cent of what it had been in 1928.²⁹ But it now seems to be recognized that a determined effort will have to be made in the Soviet to correct serious housing problems. On the other hand, in the free-choice economy of the United States a very high proportion of the capital resources of the economy have been directed by market forces into residential and related construction.

Thus it seems that the planned economy of Russia has succeeded in directing a high proportion of resources into capital formation at the expense of consumption, with the capital formation heavily concentrated in the producers' goods field. On the other hand, the American system has placed a comparatively lower percentage of resources in capital formation and a much lower proportion of such capital formation has taken the form of producers' goods. It seems likely, however, that as the Soviet economy matures there will be a shift toward a higher proportion of GNP devoted to consumption, and within the capital formation area a much larger proportion of resources will have to be devoted to types of physical capital—such as housing—which are less conducive to economic growth.

Summary and Conclusions

The United States has a highly developed system for the financing of capital formation, with a wide variety of financial institutions. The allocation of funds is, in the main, governed by market forces with interest rates playing a key role in directing funds into the highest priority uses as reflected ultimately in the free-market choices of consumers. The largest part of the aggregate sources and uses of funds is private in origin, although the use of governmental budgets to finance capital formation in the United States is surprisingly impor-

rapid growth of urban population. But it is now recognized that a fairly determined attack on the housing problem cannot be longer delayed. The current Seven-year Plan will provide almost the minimum health standard of 9 square meters per capita and by 1980 it is planned to have three times the 1958 per capita dwelling space. But the fully mechanized private house and yard and private automobile which symbolize the American level of living is an expensive complex far beyond the resources of the Soviet Union now, or for a long time to come." See also *Dimensions of Soviet Economic Power*, p. 83, Table 9.

²⁹ Bergson and Kuznets, *op. cit.*, pp. 239-240, Table VI. 1.

tant, especially if a broad definition of capital formation—including education—is taken. Since the end of World War II the American financial system has become increasingly competitive and lending institutions have become more willing to assume risks, so that our system has undoubtedly become a much more efficient means for directing resources into the highest priority uses, as dictated by consumers, and for improving the rate of economic growth.

In the Soviet Union the financial system is a reflection of the fact that Russia's is a planned economy, with allocation of resources to capital formation and consumption being directed by plan rather than by market forces. Funds for capital formation are largely obtained by means of a "turnover" tax and the plowing back of retained earnings of state enterprise. There is a rather extensive system of financial institutions, but their function is primarily to serve as a system of controlling production according to the over-all economic plan.

Under the market-oriented U. S. economy there has been a lesser allocation of resources to real capital formation than in Soviet Russia. In addition, a higher proportion of the capital formation in the Soviet has taken the form of producers' goods, whereas in the United States there has been a greater concentration on housing and other capital goods less conducive to growth.

Significant changes are developing in the Soviet system. They are the product of recognition that serious inefficiency is inherent in a planned economy with its lack of a rational cost and price system. As a result of the influence of Professor Yevsey G. Liberman, a Kharkov University economist, the Soviet has been experimenting with permitting the market demands of the Russian people to govern the output of goods and with enterprise "profit" as an incentive for greater productive efficiency. As the Soviet economy matures further, it is likely that the proportion of consumer goods in total output will rise markedly and that housing will be a larger proportion of capital formation. Moreover, market forces will probably play an increasing role in the allocation of resources.

Fred M. Gottheil* *A Neoclassical Interpretation of the Withering of the Soviet State*

The query, "how long is the long run," would probably evoke the same response from a neoclassical economist explaining market behavior in terms of long-run equilibrium as it would from a Soviet economist explaining the withering away of the State. Pinning both down to dates simply would not be cricket. Moreover, to confront either with historical evidence would be introducing the irrelevant. These are theoretical concepts, abstractions from reality, and not necessarily accountable to time and place.

And so it is not entirely paradoxical that in the U.S.S.R., where achievement of rapid industrialization may in large measure be imputed to the statization of economic activity, the withering away of the State remains a desideratum. Indeed, Soviet academics, now more than ever before, are discussing the question of the withering process.¹ Their concern is not whether the withering will take place, but when and how it will take place. Western economists, with few exceptions, have dismissed the withering process as an uninteresting relic of Marxian ideology. The exceptions, however, are notable. Calvin B. Hoover, for example, carefully evaluated the probabilities of a stateless U. S. S. R. in the light of prevailing Soviet policies and rejected outright the withering hypothesis.² Henry Smith, on the other hand, approached the subject on a more theoretical plane and concluded that such a withering could occur only if the marginal productivity of capital fell to

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¹ Professor Goldhagen writes: "During the past three years the theme of the transition to communism has occupied a prominent place in the party propaganda. Not since the 'heroic days' of the revolution has the shape of the future society been the object of such intense preoccupation. It was the subject of a special session of the departments of social sciences of the USSR Academy of Sciences in June 1958. It was a conspicuous item in Khrushchev's speech to the 21st CPSU Congress. A seminar held in Prague in April 1960, attended by the leading economists of all the communist countries, made this the single point on its agenda. During 1959 and 1960 Soviet presses turned out about 100 books and countless magazine and newspaper articles devoted to the image of the ultimate society." "The Glorious Future—Realities and Chimeras," *Problems of Communism*, IX, No. 6 (Nov.-Dec., 1960), 12.

² "The Soviet State Fails to Wither," *Foreign Affairs*, XXXI (Oct., 1952), 1-14.

zero.³ More recently, Marcuse, Balinky, Ritvo, Zauberman, Jasny, and Schlesinger, among others, have examined Soviet policies and platforms related to the transition to communism.⁴

Like Smith's contribution, this paper explores the theoretical implications of the withering process. Specifically, it attempts to develop a criterion to test the technical feasibility of the withering process, i.e., the transformation from a state-directed to a non-state-directed economic system. The claims of this paper are, at best, modest. No pretensions are made to explain the realities of Soviet policy. Political considerations are omitted from discussion, which is not unlike playing *Hamlet* without a Hamlet.

The paper is divided into three sections. Section I describes the concepts that will be used in the analytical parts of the paper. The model is developed in Section II, and the implications of the model for the withering process are discussed in Section III.

I

The *raison d'être* of statized socialism is principally to direct a course of economic development, i.e., to program a particular allocation of resources over time.⁵ Specifically, the State attempts to create the

³ "The Economics of Socialism Reconsidered," *Economic Journal*, LXV (Sept., 1955), 411-425.

⁴ Herbert Marcuse's *Soviet Marxism* (New York, 1961) is an exceptionally notable contribution in this area. Alexander Balinky has contributed two excellent papers concerning Soviet experimentation with communist institutions and the problems involved in planning for the stateless society: "Has the Soviet Union Taken a Step toward Communism?" *Social Research*, XXVIII (1961), 1-14 and "The Proclaimed Emergence of Communism in the USSR," *ibid.*, pp. 261-282. Herbert Ritvo's paper, "Totalitarianism without Coercion?" appeared in a symposium on "The Future Communist Society" in *Problems of Communism*, Nov.-Dec., 1960. Rudolf Schlesinger's paper, "The CPSU Programme: The Conception of Communism," appeared in *Soviet Studies*, XIII (1962), 383-406. The October, 1961, issue of *Survey* was devoted to "An Examination of the Future of the Communist Society." Alfred Zauberman's "Value, Price and Profit" and Naum Jasny's "Plan and Super Plan" appear here.

⁵ In the final text of the Program of the CPSU, adopted by the 22nd Party Congress, the functions of the socialist state are outlined. "The chief function of the socialist state—organization of the economy, culture and education—developed in full measure. . . . It must exercise control over the measure of work and the measure of consumption, promote the people's welfare, protect the rights and freedoms of the Soviet citizens, socialist law and order and socialist property, instill in the people conscious discipline and the communist attitude to labor, guarantee the defense and security of the country, promote fraternal cooperation with the socialist countries, uphold world peace, and maintain normal relations with all countries." H. Ritvo, *The New Soviet Society* (New York, 1962), pp. 165-169. (Italics mine.) On this same point Soviet writer G. Glerzerman states: "The particular features of the socialist economy are also determined . . . by the special role of the socialist state, which becomes the directing force of the country's economic development." "The Socialist State—Mighty Instrumentality for Building Communism," *Current Digest of the Soviet Press*, III, No. 41 (1960), 8.

necessary and sufficient conditions for the transition to communism.⁶ Without state direction of the economy, it is argued, a different and less desirable allocation would prevail. If individuals were free to influence the disposition of resources through some form of market mechanism, communism might never occur, or would at best be achieved only after a more lengthy period of preparatory development. In this sense, socialism is defined here as that period of time wherein the actual resource allocations differ from those which would have been forthcoming from a non-state-directed system.⁷

When resource allocations designed by the State are identical with those allocations that would have occurred under non-state direction, the *raison d'être* of the state apparatus disappears. The withering away of the State becomes technically feasible.

Analysis of the withering process, therefore, is fundamentally an analysis of changing resource patterns under state-directed and non-state-directed conditions. As defined above, the withering will depend upon convergence of these patterns. The model presented below examines the conditions necessary for such a convergence.

II

We assume a dual-sector socialist economy. One sector produces consumption goods that are entirely consumed within the period, the other sector produces intermediate goods. To simplify matters, we restrict the number of consumption goods to one and denote that by P (*present* goods). Intermediate goods are considered merely as delayed consumption goods. They too are reduced to a single commodity and we denote that by F (*future* goods). Distribution of output, X , between the P and F sectors in period t is determined by the equality of their marginal utilities, viz., $U'(P)_t = U'(F)_t$. In this manner, the maximization of utility is achieved.

⁶ Balinky outlines the essential distinctions between socialism and communism. They include (1) the withering away of the State, (2) economic abundance, (3) the development of the New Soviet Man, (4) production according to ability and distribution according to need, and (5) the elimination of any distinction between physical and mental labor and agricultural and industrial production. "The Proclaimed Emergence of Communism in the USSR," *Social Research*, XXVIII (1961), 261-282.

⁷ A non-state-directed economy simply refers to the elimination of the state apparatus as the sole determinant of resource allocation. It does not imply the elimination of the state mechanism as an executor of individual or community preferences however revealed, nor does it imply the restoration of a market economy.

The utility in period t of the P th sector, once distribution is determined, is measured by

$$\int_1^n U'(P)$$

This is simply the aggregation of the utility of n units of present consumption. The evaluation of intermediate goods produced in period t , however, is somewhat more involved. Since, in the socialist economy, intermediate goods are considered merely as delayed consumption, the utility of these goods in period t implies an evaluation of future consumption.⁸ The classical notion of time preference is applicable. The utility of the F th sector in period t is thus measured by the summation of the expected flows of future consumption generated by the utilization of the intermediate goods. To simplify the evaluation, we assume flow of k units of consumption for m periods, discounted to period t by r .⁹ This is written as

$$\int_1^n U'(F)_t = \sum_{i=1}^m \int_1^k U'(P)^{t_{(t+i)}} / (1+r)^i$$

This form is convenient. We can express aggregate output as a collection of one commodity over time or as two distinct commodities, differentiated by time.

$$X_t = \int_1^n U'(P)_t + \sum_{i=1}^m \int_1^k U'(P)^{t_{(t+i)}} / (1+r)^i \quad (1)$$

⁸ "The first attempts to introduce some precision into Soviet thought on full communism," writes Alfred Zauberman, "have now been made, with the emergence of the new mathematical school in economics. . . . Time is the resource in incurably short supply, independently of the way in which communities are organized. This implies the necessity of 'converting' the future into the present, of 'discounting' it in one way or another under full communism (and even more under socialism—the point which the Soviet mathematical economists are actually out to establish)." "Value, Price and Profit," *Survey*, No. 38 (Oct., 1961), pp. 55–56.

⁹ The assumption of a continuous flow of k units abstracts from the more complex case of differentiation among investments. Clearly, investments that are made in consumer-goods industries generate final consumption flows sooner than equivalent investments made in producer-goods industries. Thus, for every set of investment possibilities there exists a unique consumption flow pattern. Also, technological changes, whatever their origin, affect the consumption flow pattern. The aggregation of investment made in the equation only simplifies the idea that investment in a socialist economy can be evaluated as delayed consumption, and that the utility of this consumption is measured by the application of a discount factor to future consumption flows. For an elegant treatment of this problem, see S. Chakravarty, "Optimal Investment and Technical Progress," *Review of Economic Studies*, XXI (June, 1964), 203.

The distribution of output between F and P is regulated by the value of r . The greater this value, the less is the present utility of future consumption and consequently the smaller is the F/X ratio.

We assume in our model an inverse relationship between the values of r and X .

$$r = \Phi(X); \Phi' < 0 \tag{2}$$

This relationship is principally attributed to the diminishing marginal utility of rising consumption which we assume holds in a socialist economy. This relationship implies

$$F/X = f(X); f' < 0 \tag{3}$$

The rate of growth, g , is directly related to the proportion of output allocated to intermediate goods.

$$g = f(F/X) \tag{4}$$

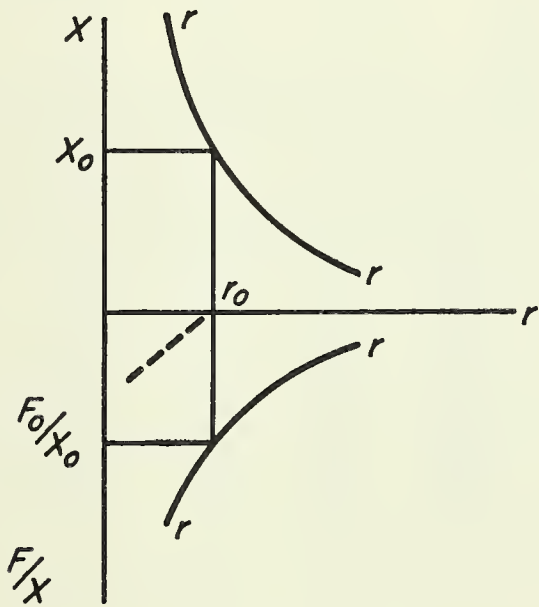


Figure 1

These relationships are incorporated in Figures 1 and 2. Given an initial value, X_0 , the rate by which future consumption is discounted is r_0 .¹⁰ Having attained r_0 , the value of F_0/X_0 is determined. Relating g

¹⁰ The dotted function reflects the vicious circle of poverty. At X_0 , net capital formation is zero.

to F_0/X_0 , the time path from X_0 to any target output X_t is determined by the recursive system.¹¹

III

Analysis of the withering process in a socialist economy follows directly from the above discussion. Resource allocations developed under state-directed and non-state-directed conditions are differentiated by their respective rates of discounting future consumption. The shape of the non-state-directed function is described by equation 2 in

¹¹ For example, we may assume three different r functions, assign values to r over time, and trace through the output path associated with each function:

t	$r = k$			
	r	X	F/X	g
0	.06	100	.113	6
5	.06	134	.113	6
10	.06	179	.113	6
15	.06	240	.113	6
20	.06	321	.113	6
25	.06	429	.113	6
30	.06	574	.113	6
35	.06	769	.113	6
40	.06	1029	.113	6
45	.06	1376	.113	6
50	.06	1842	.113	6

$r = f(1/X)$			
r	X	F/X	g
.06	100	.113	6
.058	135	.121	6.4
.056	185	.131	6.9
.054	262	.141	7.4
.052	379	.151	8.0
.05	562	.161	8.5
.048	853	.171	9.0
.046	1329	.181	9.6
.044	2121	.191	10.1
.042	3460	.201	10.6
.04	5784	.211	11.1

$r = f(X)$			
r	X	F/X	g
.04	100	.200	11
.042	163	.193	10.5
.044	266	.183	10
.046	425	.173	9.4
.048	658	.163	8.9
.05	992	.153	8.3
.052	1464	.143	7.7
.054	2101	.133	7.2
.056	2947	.123	6.7
.058	4029	.113	6.1
.062	5367	.103	5.6

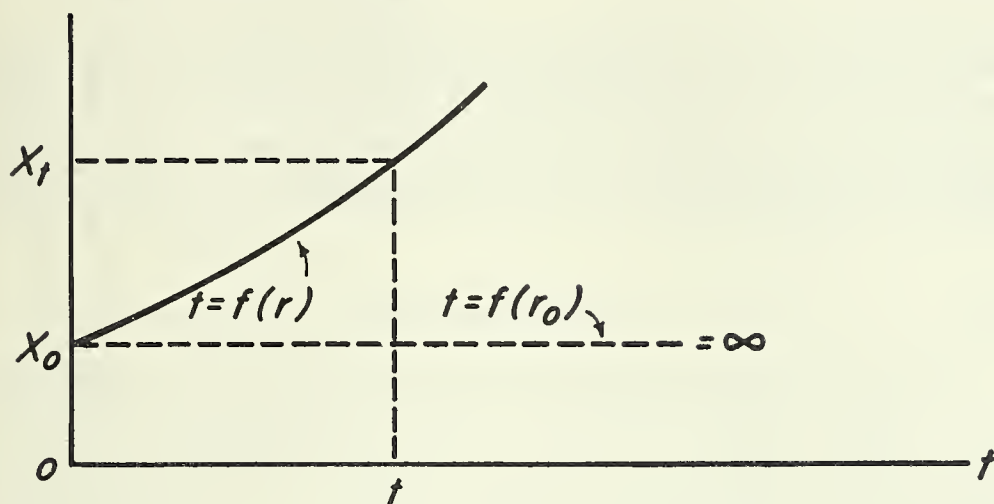


Figure 2

the above section. The State's discounting function, r_s , on the other hand, may take any of four forms.

(1) _____ $r_s = 0$

The State may not reveal any preference between a unit of present and a unit of future consumption. The argument may be made that future generations should count as much as the present one, and that while it is realistic for individuals to discount the future, this is not necessarily so for the State.¹² Critics of the zero discount rate, however, argue that (a) if no discounting were employed by the State, present consumption would be at subsistence levels as long as marginal productivity of capital is positive, (b) that it implies the improbable constant marginal utility of rising consumption, and (c) that it also assumes an infinite time horizon for the State.¹³ The Soviet theorist Strumilin put the matter succinctly by recalling that in the world of uncertainty, in socialist as well as non-socialist economies, a bird in the hand is worth two in the bush.¹⁴

(2) _____ $r_s = k > 0$

¹² J. Tinbergen and H. C. Bos, *Mathematical Models of Economic Growth* (New York, 1962), p. 25.

¹³ An interesting discussion concerning the applicability of time preference to socialist planning is found in A. K. Sen, *Choice of Techniques* (Oxford, 1960), pp. 82-89, and Maurice Dobb, *An Essay on Economic Growth and Planning* (Oxford, 1961), chap. i.

¹⁴ S. Strumilin, "The Time Factor in Capital Investment Projects," *International Economic Papers*, I (1951), 160-185.

The State's discount rate is positive and independent of the level of output. This function meets two of the three objections raised in the zero rate. The function still implies a constant marginal utility of rising consumption. It expresses the willingness on the part of the state to impose upon earlier generations a greater sacrifice of utility in order to build the socialist state.

$$(3) \quad r_s = g(X); g' < 0$$

The State's discount rate varies inversely with the level of output. This behavior reflects the State's desire to distribute the task of development in some proportionate manner over time. As output increases, it is argued, the State can better afford to divert consumption from present to future periods in order to attain those conditions necessary for the transition to communism.¹⁵

$$(4) \quad r_s = g(X); g' > 0$$

The State's discount rate varies directly with the level of output. This function suggests a gradual relaxation policy. With increasing output, the State becomes more willing to taste the fruits of development. As the gap between actual output and some predetermined target level closes, the significance of sacrifice becomes less meaningful to the State.¹⁶

¹⁵ Consider Stalin's statement to the 16th Party Congress in 1930. "We are in favor of the state dying out, and at the same time we stand for the strengthening of the dictatorship of the proletariat. . . . The highest possible development of the power of the State, with the objective of preparing the conditions for the dying out of the state: that is the Marxist formula." Khrushchev's position as late as 1959 reflected a similar approach to the question of state's role in economic development. To the 21st Party Congress, he stated that "the state proceeds towards the withering via its maximum strengthening." The conflict between Khrushchev and Malenkov during the 1953-1955 period can, in part, be explained by their different preference functions. Malenkov was prepared to relax the pressure on present consumption by downgrading the targets for intermediate production. Khrushchev, at that time, opposed this shift in emphasis.

¹⁶ Consider Naum Jasny's evaluation of the CPSU's 1961 Draft Plan. He writes: ". . . consumer goods are treated in the 20-year plan better than they were by Khrushchev in 1954-55, and in the 7-year plan for 1959-65. Indeed, no previous plan in the USSR has given anywhere near as much space to the well-being of the population as does the new plan. There is reason to believe that the change is due to the pressure of the population, which can make itself felt in spite of the dictatorship." "Plan and Superplan," *Survey*, Oct., 1961, p. 34. Prior to the 22nd Party Congress, Khrushchev was reported to have said: "Now we consider our heavy industry built so we are not giving it priority. Light industry and heavy industry will develop at the same pace. . . . We now consider that we have created the base." *New York Times*, May 21st, 1961, p. 1. But four years later Mr. Khrushchev

The State's preference function may, over the course of socialist development, take on the characteristics of all four alternatives. For example, in the early periods, the State may assign a high discount rate to future consumption, reduce the rate as output expands within a specified range, and revert back to the less intense development policy in the final stages.

Whatever the representative state function, the withering away of the State will depend ultimately upon the convergence of the State's and non-State's or community's preference functions. This occurs at $\bar{X}$ in Figure 3. Consider any output less than $\bar{X}$, e.g., X_o . At this level of output, the State's discount of future consumption flows is less than the community's, i.e., $r > r_s$. Consequently, the F/X ratio considered desirable by the State is greater than the ratio that would have resulted had the decisions been left to the non-directed community, i.e., $F_{os}/X_{os} > F_o/X_o$. Thus, at output levels below $\bar{X}$, the state-directed growth rate exceeds the non-State directed rate, i.e., $g_s > g$. These inequalities explain the existence of the State. As output directed by

was removed from power. Harry Schwartz of the *New York Times* (Oct. 16, 1964, p. 14) comments on his decline:

It was also noted that the Khrushchev exit from power came only two weeks after the Soviet press had published the former Premier's call for a historic change in Soviet economic policy to give consumer needs top priority over heavy industry in operation of the Soviet economy. . . .

The matter on which the most public evidence exists is the issue of the relative priority of consumer goods as opposed to heavy industry and armaments in Soviet economic planning. Almost a decade ago Georgi M. Malenkov had to resign as Premier after trying to follow a pro-consumer policy.

Mr. Malenkov's argument then was that Soviet heavy industry had been developed sufficiently so that the country could turn more of its energies to raising the standard of living. This was precisely the argument made by Premier Khrushchev in a recent speech calling for consumer needs to have priority in future Soviet planning. That speech has not been published and only a summary has appeared in the Soviet press.

In June, 1961, Mr. Khrushchev made a similar declaration in a speech delivered at the opening of a British exhibition in Moscow. That speech was never reported in the Soviet press and the rejection of this view as made plain in the Communist party program announced later that year.

This program's 20-year-plan for bringing full Communism to the Soviet Union explicitly calls for continuing the historic Soviet policy of increasing heavy industrial production more rapidly than the output of consumer goods.

Mr. Khrushchev in various speeches has referred to opposition from unidentified officials who prefer to produce more steel and other heavy industry goods rather than to shift to the output of goods that meet the people's needs.

There have also been insistent reports of military opposition to Mr. Khrushchev's pro-consumer views. High-ranking officers allegedly feared his policy would mean a cut in Soviet military appropriations and in Soviet emphasis upon defense production. . . .

the State increases within the range $X_0\bar{X}$, the inequalities diminish.¹⁷ At the critical level $\bar{X}$, the allocations desired by the State would be realized even if community preferences prevailed. The State's monopoly on preference satisfaction, therefore, becomes obsolete. The withering away of the State becomes technically feasible. And even if the state apparatus were still used to allocate resources at and beyond $\bar{X}$, it can be said to do so only in an administrative capacity.¹⁸ The salient point is that the community desires concerning distribution of output between present and future consumption would be satisfied.

The period of socialism is thus defined as the time interval between X_0 and $\bar{X}$. Analysis of the State's determination of the optimal time span of socialism is essentially restating the analysis of the intertemporal preference functions. Simply to equate the optimal with the shortest, a common "rule of thumb" to explain Soviet economic strategy, is to describe only one consumption flow pattern. Soviet thinking reflects something less than unanimity on this matter.¹⁹ The period of socialism depends upon the relative shapes of the State's and community's functions. Three sets of such functions are illustrated in Figures 3a, 3b, and 3c. These are translated into time dimension in Figure 4.

The convergence of the functions, or the withering process, is to the Soviets not entirely a matter of the State's preferences gradually approaching those of the community's, although the gap is clearly reduced by the State's substitution of present for future consumption as output rises. Indeed, much of the current writing in the U.S.S.R.

¹⁷ Compare this statement with Alfred Zauberman's: "It is arguable that in a society better off than the Soviet Union today, the conflict between the individual scales of preference and those of the planner may be expected to relax; the more affluent it becomes, the less intense the clash is likely to be." "Value, Price and Profit," *Survey*, Oct., 1961, p. 59.

¹⁸ The argument here is not that the State *will* wither. The paper merely explores the theories of withering. It would be equally interesting to consider the possibilities of extended non-convergence. If, for example, $r_s < r$ initially and both functions are relatively inelastic with respect to output, convergence may never occur. Or, if the State's function is related not to output but to the community's function and takes the form $r_s = r - k$, then the period of preparatory socialism would be extended indefinitely. In this case, the disparity between the rates may simply reflect the State's unwillingness to dissolve itself regardless of achievement.

¹⁹ In an article entitled "Building Communism and the Problem of Accumulation," P. S. Kholodov writes: "Many different opinions are expressed on the trends of accumulation in the period of the transition to communism. Some economists maintain that with the development of the socialist society the rate and volume of accumulation will decline. In our opinion, this point of view is incorrect." *Problems of Economics*, XI, No. 5 (Sept.-Oct., 1962), 21.

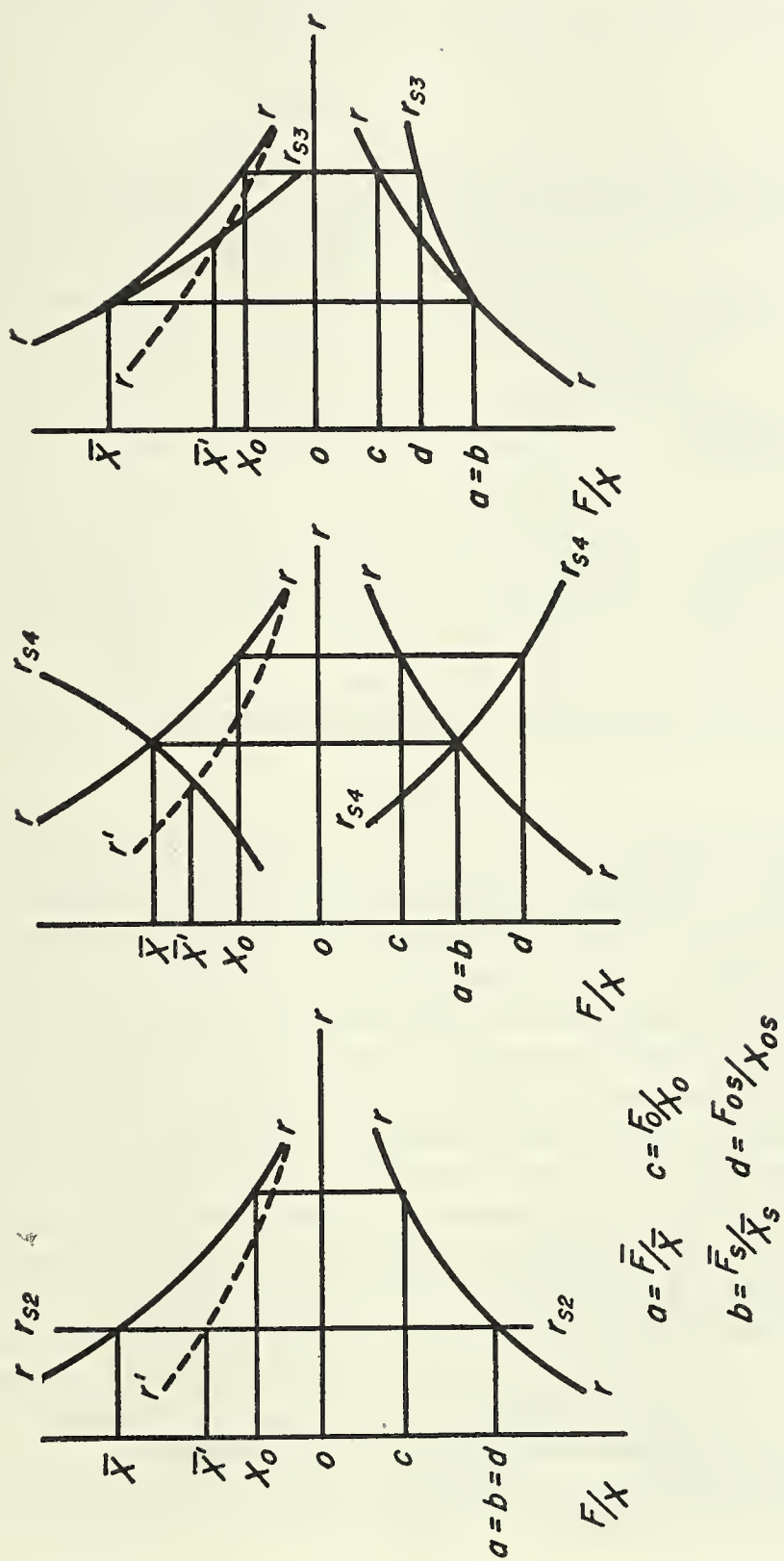


Figure 3

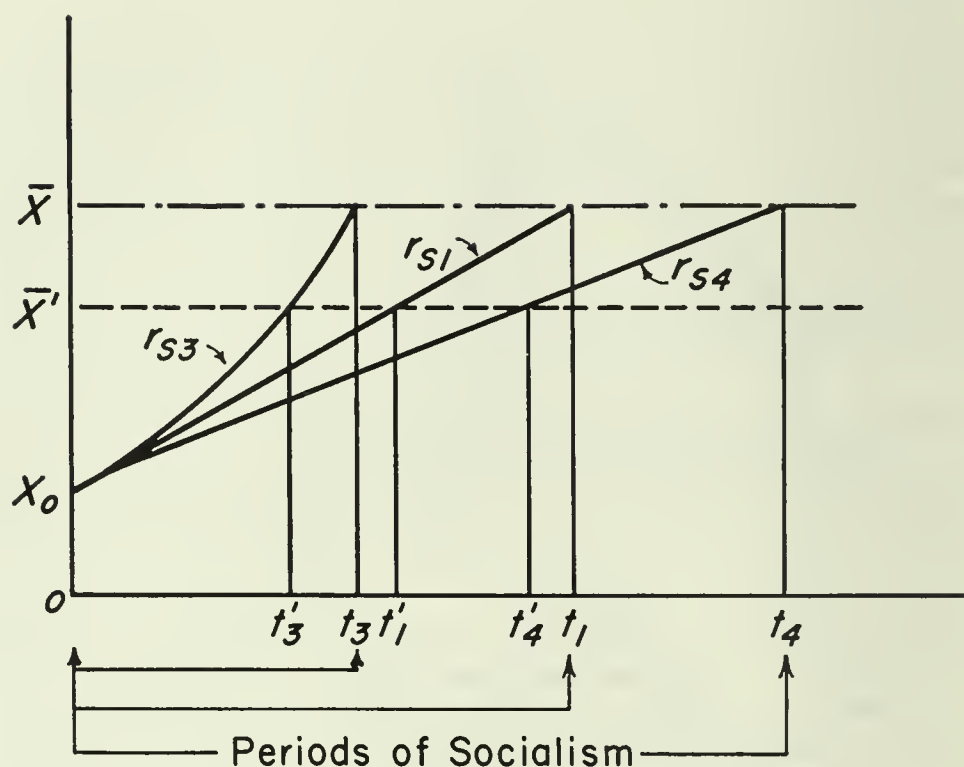


Figure 4

suggests the opposite. The community's function, it is argued, must somehow be modified to resemble more closely the State's. This growing interest by the Soviets in the non-directed consumption behavior reflects the now-abounding literature concerning the development of the New Soviet Man. He has become an essential component in Soviet theory concerning the transition to communism. The allocation decisions made by the State under socialism, it is argued, can reflect more accurately the community's preferences than can the decisions made by the community itself. The State is better equipped during this period to incorporate into its decision-making process the social utilities and disutilities associated with competing consumption patterns. State's preferences exclude the non-essential, artificially-induced demands that characterize the untrained individual consumption. The New Soviet Man is essentially an individual whose *educated* consumption behavior corresponds to the State's. For example, Soviet ideologists ask in *Fundamentals of Marxism-Leninism*:

Some non-too-clever critics of Marxism try to prove the unfeasibility of the ideals of communist society by raising various "tricky" questions. If all

benefits are distributed gratis, will not everyone want to get every day not only a new suit of clothes but also a new automobile?

They also provide the answer.

The authors of such absurd suppositions slander the citizens of the future communist society, to whom they ascribe their own failings. The communist system naturally cannot undertake to satisfy all whims and caprices. People themselves will be sufficiently cultured and conscious not to make obviously unreasonable demands on society. . . . Communist social relations will educate a man who will abhor depraved tastes and requirements, characteristic of past epochs when possession of things and the level of consumption were primary criteria of man's position in society.²⁰

It is not at all inconsistent therefore for Professor Drewnowski to state that there can be no virtue in attempting to derive state-preference functions from individual functions, and later to argue that a perfect democracy might be defined as a system in which the State's preferences represent people's interests in an accurate way.²¹ Soviet interpretation of freedom as "recognized necessity" becomes understandable in this context.²² Modifying r by r' in Figures 3 and 4, which record the discounting behavior of the New Soviet Man, the withering away of the State is achieved at $\bar{X}'$. The period of socialism is shortened from Ot to Ot' .

Also, the further oft-stated requisites to communism of economic abundance and distribution according to need follow from the analysis. Since at $\bar{X}$, the F/X ratio desired by the State is identical to the ratio determined by the community, their respective P 's are equal. If economic abundance, however defined by the State, is not achieved by the P associated with $\bar{X}$, the development of the economy from $\bar{X}$ to a higher level of output which yields the state-desired P can be undertaken by non-state direction. This possibility, however interesting, lies outside the Soviet pale. Soviet theorists, without exception, identify the attainment of abundance with convergence. Distribution according to need is a corollary to economic abundance.²³ The distribution prob-

²⁰ (Moscow: Foreign Languages Publishing House, 1963), pp. 705-707. See also Yuri Pismenny's "The 'New Man,'" *Studies on the Soviet Union*, IV, No. 1 (1964), p. 49, and Balinsky, "Has the Soviet Union Taken a Step toward Communism?" *ibid.*, p. 1.

²¹ Jan Drewnowski, "The Economic Theory of Socialism: A Suggestion For Reconsideration," *Journal of Political Economy*, LXIX, No. 4 (Aug., 1961), 341.

²² Marcuse, *Soviet Marxism*, p. 136.

²³ The world of communism, according to Soviet theorist Novozhilov, will be a world of continuing scarcities. Zauberman, *op. cit.*, p. 56. Although the Soviets plan to reduce all prices to zero, the commodity value will still reflect real opportunity costs. Abundance, however described, does not imply the elimination of real scarcities. Compare this forecast with Smith's conclusion that the marginal productivity of capital must fall to zero. Smith, *op. cit.*, p. 419.

lems are purely administrative, once the convergence takes place.²⁴

The value of this approach to the analysis of the withering away of the State and the transition to communism is essentially its simplicity. Much of the literature concerning Soviet policy on the transition to communism from both Soviet and non-Soviet sources complements this discussion. This paper sketches a theoretic structure to explain the allocation of scarce resources between investment and consumption in the U.S.S.R. and suggests that the proclaimed conditions to communism of economic abundance, distribution according to need, the creation of the New Soviet Man, and the withering away of the State can be treated as an integral part of the study of intertemporal preferences between the community and the State.

²⁴ "The Soviet 20-year programme toward communism envisages a shift in distribution from personal income to free social services. As the plan progresses, a greater proportion of the workers' wages will be in the form of this social fund. By 1980, the fund should account for 50% of total real income. When all pay consists of these gratuitous services there will be communism and the realization of the principle 'to each according to his needs.'" Jasny, *op. cit.*, pp. 41-42.

R. Murray Havens* *German Recovery: A Study in Economic Planning*

In the decisive year of 1933, as he studied the rise of the Nazi party in Germany, Professor Hoover wrote these foreboding words:

These five years (1924–1929) were the critical years. If we could, during these years, have solved the international problems left over from the war and at the same time have solved the economic problem of finding a market for the products of our gigantic physical plant, we could have been able, no doubt, to continue along a curve of economic, social and political development which would have had in it only the gap of the war years. These problems, however, remained unsolved, and the consequences must now be faced.¹

Despite all the clarity of foresight which Dr. Hoover has so frequently demonstrated, it is not likely that the desperate nature of those consequences was more than vaguely glimpsed. The moral degradation brought by the Nazi movement and the personal suffering caused by the ensuing war must surely be one of history's most bitter lessons regarding the cost of the failure to deal intelligently with economic problems.

It is not intended to argue that unsolved economic problems were the only cause of Hitler's rise to power, but they were certainly one of the most important contributing factors. Looking backward at this period Professor Hoover made this judgment in 1959: "It is certainly true that the severe economic depression which held Germany as well as the greater part of the capitalist world in its grip from 1929 onward was the all-important factor which brought National Socialism to power in January 1933."² The primary thesis of this paper is that intelligent planning by West Germany's officials in conjunction with those of the other Western nations has thus far solved the important economic problems since the end of World War II. This successful planning is the most important factor in accounting for the difference

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¹ Calvin B. Hoover, *Germany Enters the Third Reich* (New York, 1934), p. 1.

² Calvin B. Hoover, *The Economy, Liberty and the State* (New York, 1959), p. 171.

between the tragic series of events following 1918 and the rebuilding of prosperous economies after 1945.

The idea that the postwar prosperity in West Germany is due to economic planning certainly runs counter to commonly expressed opinions of many observers of events in that country. Probably the most important reason for the general belief that laissez-faire policies have been followed in the Federal Republic is the repeated denunciation of planning by Ludwig Erhard. For example, in a 1946 article entitled "*Free Economy versus Planned Economy*" he wrote:

Anyone who wishes is welcome to believe that a planning and regulating economic authority might be a better judge of the economic intentions and wishes of society; but just let him try to prove it. What can be said is that in a free market economy mistakes of judgment in the management of affairs automatically produce price changes with all their attendant repercussions whereas in a state-directed economy there is always the danger that equally serious mistakes can be covered up and left to fester until they ultimately erupt with elemental force.³

While such denunciations of planning by the state have been repeatedly made by Erhard, a careful reading of each complete statement reveals that the planning of which he disapproves is that making use of microeconomic controls. He does not appear to include macroeconomic controls in the concept of economic planning, and certainly he has approved the use of monetary and fiscal policies in tremendous variety.

Yet it is in the area of macroeconomic controls that the revolution in economic planning for capitalistic economies has taken place. It is from the great stream of Keynesian thought that the policies have been developed which have made possible the successes of economic planning in the two decades following World War II. Not only has Germany benefitted from the utilization of macroeconomic controls by the capitalist world, it has applied policies as definitely Keynesian as any other Western nation. German recovery is another demonstration of the validity of the economic analysis which has its foundation solidly built on the *General Theory*.

The policies which have been used to implement the economic planning in West Germany have been well-selected, relative to the conditions existing at the time they were adopted. One of the most difficult problems in the selection of appropriate economic policies is

³ Ludwig Erhard, *The Economics of Success* (Princeton, 1963), p. 9 (article reprinted from *Die Neue Zeitung* for Oct. 14, 1946).

fitting them to the pattern of facts in which they must operate. German officials have made their selection of policies from the alternatives open to them with very considerable skill and intelligence. Let us now turn to a quick survey of the events of the past twenty years in West Germany and examine the policies adopted at various stages in that remarkable economic recovery.

In the summer of 1945 the Nazi government lay destroyed in the rubble of the German cities. The problem of replacing it had not really been faced by the officials of the United States or Great Britain because they were still hoping that a unified control with Russian co-operation could be implemented. In the meantime the instructions to the lower levels of military government were that appointments of local German officials should be made without reference to political views, provided only that they were free of Nazi affiliations. Unfortunately, the early denazification regulations were so strict that the more moderate anti-Nazis could not be appointed. Too often the only available people for governmental positions seemed to be those with obvious communist leanings. But from the first days in the occupation of Western Germany the American and British officers on the ground knew that effective government would come in their area only through officials who were sympathetic to the establishment of democratic capitalism. Gradually such people were found, and the process was significantly aided by the relaxation of the more extreme denazification regulations.

With the passage of time it became increasingly clear that the establishment of unified control with Soviet participation could not be immediately implemented. But government for the occupied areas had to be provided. Local governmental and economic problems were necessarily handled first, but even in the first few months it was clear that public officials in one town must deal with those in nearby communities on matters of tax collections, police co-operation, public health, and a host of other issues. Economic problems also demanded regional, rather than local, decisions. Utility lines did not end with city limits. Coal had to come from the mining regions. Transportation could not be restored on a local basis. Local banks were not independent, but branches of a national organization. The solution of these broader problems forced the creation of effective regional government, and by late 1946 the pressure of these needs had resulted in the creation of the Bizone (a combined control over the British and

American occupied areas). Naturally, the Russians refused to participate in such regional arrangements, and it may have been an indication of difficulties to come two decades later that the French refused to participate in the Bizone agreement until after the Marshall Plan operations forced combined planning for West Germany.

For an understanding of the course which German economic policy has followed since 1945 it is necessary to keep in mind the limited alternatives which were presented in the first months following the end of the fighting. The option of a gradual relaxation of wartime controls, which was the policy of most other non-Communist European nations, was not available to West Germany. Effective economic controls require a reasonably efficient government generally accepted by the people. In the political and economic chaos of West Germany in the early years after 1945 no such basis existed.

Government in the Western occupied areas was unavoidably weak and ineffective. The politically unacceptable governmental officials of the Nazi period had been replaced by men without proper experience whose ability could be determined only by their performance in the job. Many good men were deterred from accepting positions in the government because of the numerous uncertainties in the situation. No one knew how long it would be before the existing political structure was replaced by an agreement with the Soviet occupation forces. Nor in the minds of the German people was there any confidence that the Russian army might not take over the rest of the country at any time as a result of American and British military weakness following demobilization in late 1945 and 1946. Officials appointed by Western military authorities were likely to be regarded as collaborators by the German people and certainly would not be popular with the Russians if they moved into the area. Until it was clear that the established governmental structure would not be immediately replaced, there was little reason for its active support by the people. Knowledge that the important decisions were being made by the occupation authorities, rather than by the German officials, also tended to destroy their prestige and effectiveness.

The economic situation was, if possible, even more chaotic than the political. In most Western countries postwar economic controls were aimed at a reasonably fair distribution of scarce goods during the period of reconversion from production of military supplies to output for normal consumer purposes. In Germany, on the other hand, there

was so little production that equitable distribution of the few goods available appeared far less important than providing the motivation for expanding output. In 1947, two years after the end of fighting, the index of industrial production in the Bizone showed operations at barely one-third the level of 1938.⁴ Under some circumstances effective governmental controls over labor supply, allocation of raw materials, priorities in the use of transportation and the utilization of limited investment resources might hasten the restoration of normal production, but this was not the case in Germany in the early postwar years. The governmental structure was far too weak and the destruction of the old productive mechanism much too complete for a system of microeconomic controls to operate successfully.

As every major nation discovered during World War II, the management by government of a modern industrial economy is incredibly complex. Elaborate control over an economy is an attractive policy for accomplishing relatively simple ends, such as production for military purposes, by a strong government with effective popular support and an adequate supply of trained personnel for staffing the agencies. Such a system of controls was beyond the capacity of the recently reconstituted German political system. As a result the German officials appropriately decided to abandon as rapidly as possible the microeconomic controls which had been instituted under the Nazi regime and continued as an interim policy under military government. The functioning of a free market promised much greater efficiency in providing incentives for production and in securing equitable distribution of scarce goods and services than the continuance or modification of existing controls. The widespread practice of barter and the utilization of such things as cigarettes or soap as a medium of exchange clearly revealed how completely the continuance of unenforceable regulations and the lack of an acceptable currency had destroyed the production incentives and the usual distribution channels provided by the functioning of a normal market.

The extreme disillusionment of the German people with controls reinforced the decision to make greatly increased use of a relatively free-market system as the mechanism for allocating productive factors, for providing motivation for production, and for distributing scarce consumer goods. Detailed economic regulations dated back to the early

⁴ For a general treatment of early postwar production, see Horst Mendershausen, *Two Postwar Recoveries of the German Economy* (Amsterdam, 1955), pp. 5-7.

days of the Nazi regime and were associated with all the other evils of the period from 1933 to 1945. Neither was the experience with the continuance of legal (but largely unenforced) controls during the postwar period of near-starvation and other severe hardships any more pleasant. A political party which promised the immediate reduction and ultimate elimination of such unpopular controls could count on considerable support at the polls. But the actual elimination of the legal restraints had to proceed with caution if severe inflation were to be avoided in the period of scarce consumer goods before the productive mechanism began to function effectively again.

Some authorities have pointed out that the *Soziale Marktwirtschaft* theories of the Freiburg school were an important influence in the decision of the German government to increase its reliance upon a free market.⁵ Probably the existence of an academic group with a reasonably well-thought-out set of doctrines made it easier for Ludwig Erhard to urge a policy of partial decontrol, but the administrative and political advantages of such a policy must have been even more important in the final decision. While German officials in this postwar period have frequently expressed adherence to a relatively conservative capitalist ideology, their actual policies have been the result of a highly pragmatic approach to the problems they faced.

One of the first important decisions they made was an outstanding example of imaginative pragmatism. It was quite clear that restoration of free markets would require much more than a mere cancellation of existing regulations. The quantity of money had greatly increased under the Nazi regime, and the occupation forces had made their contribution to the expansion. By making the American plates for printing occupation currency available to the Soviet forces we had made it easier for them to contribute to the excess of paper money. But the Russian-issued currency did not create the tremendous inflationary pressure; it only added to an already difficult problem. Mendershausen has estimated the monetary imbalance caused by the increase in the money supply and the decrease in supply of goods at about 28 to 1 near the end of 1945.⁶ He further estimates that by 1948 some small decreases in the quantity of money in circulation and limited increases in the production of consumer goods had reduced this inflationary

⁵ See, for example, Henry C. Wallich, *Mainsprings of the German Revival* (New Haven, 1955), pp. 113-119.

⁶ Mendershausen, *op. cit.*, p. 33.

overhang to approximately 10 to 1. This rough estimate appears to be verified by the outcome of the monetary reform.

Under these conditions the simple removal of price controls and rationing would have resulted in a rapid rise of prices to approximately ten times the existing legal level. Perhaps under some circumstances an economy could withstand the shock of such a change in the price level, but the German people were hypersensitive to the dangers of inflation. The loss of 90 per cent of the value of the mark in a short period would have left them with a complete lack of confidence in any future stability of their monetary system. Since prices could not be allowed to adjust to the quantity of money, pragmatism required that the money supply be adjusted to the existing price level. A destruction of the major part of the currency in circulation was the policy decided upon, although this approach toward monetary problems has no basis in the laissez-faire theories of nineteenth-century (and even later) writers. Even the much smaller manipulation of the monetary system represented by the 1934 change in the gold value of the American dollar is still being denounced as an outrage in some circles. But where the New Deal returned to the holders of gold coins almost 60 per cent of their value at the new gold price, the German government in 1948 did not return even 10 per cent on the money surrendered. The theoretical basis for such manipulation of the monetary system lies not in the writings of the classical free-market economists, but in the attitudes toward the money supply and its control expressed in Keynes's *General Theory*. The policies which were followed are not those of Keynes, but the belief that the money supply must be managed according to the requirements of the economy clearly is in the later tradition.

The details of the 1948 monetary reforms have been recorded in too many places to require any repetition here. But it must be emphasized that a policy of calling for the surrender of all money and then repaying approximately 61½ per cent was a drastic one indeed. The seizure and destruction of more than nine-tenths of the monetary wealth of the individual citizen is not an illustration of the application of laissez-faire economics. It was macro-planning on an heroic scale. The very considerable success of a more limited conversion by Belgium in late 1944 undoubtedly encouraged the later German action, but such a policy nevertheless required courage and imagination.

The immediate restoration of confidence in the mark following the

monetary reform was the foundation upon which the German officials began their reconstruction of the economy. Observers are generally agreed that the entire spirit of the country changed overnight. From hopeless frustration the attitude of the people changed to a feeling that the future of Germany depended upon the willingness of her citizens to tackle the job of rebuilding. Part of this new attitude was undoubtedly due to the recognition that the creation of the new *Deutsche* mark in June, 1948, meant the final abandonment by the Western allies of the effort to reach agreement with Russia on reunification and that Soviet vetoes of effective economic action in the West would no longer be permitted. But a significant part of the change was due to the fact that the scarcity of the new money made it desirable and worth giving up physical effort or even goods to secure. By one dramatic act the basic incentives of a market economy had been restored. The German government immediately began to build upon this foundation.

There can be no doubt that the nature of the problem was well understood by the officials who were making the decisions. Chancellor Erhard has expressed it very well in the following statement:

Over and above this [the monetary reform], there are in my opinion three main factors to which later economic successes can be attributed. Although at that time the extent of the destruction suffered by the economy's production facilities could scarcely be assessed, the Federal Republic of Germany nevertheless possessed a highly qualified labour potential consisting of well trained skilled workers and experienced technicians and businessmen. In addition, there was a stratum of the population comprising entrepreneurs who, backed by rich tradition, were prepared to overcome all impediments and set about rebuilding their companies. Furthermore, the outside help received by the Federal Republic during that period helped to conquer the great initial difficulties, and subsequently proved to be a priming charge with an undreamed-of multiplier effect.⁷

Germany in 1948 was not a stagnant, underdeveloped country like many parts of Africa and Asia today, where part of the necessary role of government is to play the part of the entrepreneur until a body of trained and imaginative businessmen can be developed. Part of the trouble in economically backward areas is that there is no group of entrepreneurs who can see the possibility of profit from industrial development. But that was not the problem in Germany in the post-World War II period. The recent history of the country clearly demonstrated the feasibility of efficient industrial production. Efficient

⁷ Ludwig Erhard, "A New Bond between Economists," *German Economic Review*, I, No. 1 (1963), 4.

labor existed, the necessary raw materials were available, and the markets of the world were crying out for the steel and machinery which Germany clearly could produce. The economic planning by Erhard and his co-workers did not require the stimulation of the industrial community; rather it required the relaxation of hampering restrictions. This action they proceeded to take.

If markets were to function as the primary regulators of economic activity under the *Soziale Marktwirtschaft* theory, it was necessary to allow them as much freedom as possible. But the widespread German fear of inflation caused Erhard and his fellow officials to proceed with caution. Abandonment of rationing and price controls while consumer goods were still very scarce would certainly bring a rapid rise in prices unless the new profit possibilities brought a very quick increase in production. Prices of goods or services which could not be quickly increased in volume, such as basic foods, coal, oil, steel, transport, utilities and housing, were continued under controls. But manufactured consumer goods were generally freed from control, because it was believed that the rapid increase in their supply would prevent a serious inflationary rise in price. A more carefully *planned* and selective relaxation of controls would be hard to imagine.⁸ Even this limited decontrol would inevitably have led to serious inflation, if the planners had not been able to count upon a greatly reduced quantity of money in circulation following the reform and an imminent significant increase in the volume of consumer goods as the Marshall Plan got into operation.

The calculated gamble with inflation in order to free production incentives proved to be soundly based. Although the cost of living rose about 14 per cent between June and December, 1948, the index of industrial production showed almost a 50 per cent increase in the same period. While the flow of goods from American aid increased somewhat more slowly than had been hoped, the release of hoarded goods exceeded expectations. Inflation was kept within reasonable limits and the confidence of the people in the real value of the new money was firmly established. In view of some recent arguments in favor of restoring the nineteenth-century gold standard, perhaps it should be noted that the establishment of a sound money in Germany in 1948 was not based upon the accumulation of a gold reserve. Rather it was

⁸ For a good brief description of the relaxation of controls, see Wallich, *op. cit.*, pp. 119-127.

People
gained
respect
for their
currency

based upon the planned management of the quantity of money relative to the flow of real goods and services.

In the short run effective planning required the restoration of production in existing facilities, but for the long run the basic problem was the rebuilding of the capital goods which had suffered so greatly during the war by the bombing and to a lesser degree by dismantling in the early postwar period. It is in this planning for investment that the most interesting application of Keynesian analysis is found.

At the very center of the *General Theory* is the thesis that the level of production and employment in the private economy is controlled primarily by the decisions regarding investment. Among the many quotations making this point is the following: "It follows, therefore, that, given what we shall call the community's propensity to consume, the equilibrium level of employment, i.e., the level at which there is no inducement to employers as a whole either to expand or to contract employment, will depend on the amount of current investment."⁹

The high rate of private investment during the period of rapid German recovery is certainly consistent with the basic analytical framework of the *General Theory* and of the national income analysis which has been built upon it. The expanding levels of employment and rises in GNP from 1950 to 1961 coincide much too closely with the high levels of investment to leave any doubt that they are closely related. The following table shows the figures involved in this relationship.

It would clearly be absurd to argue that the policies for securing investment which Keynes supported in a period of deep depression were also appropriate for inducing investment in an economy emerging from the effects of a disastrous war. Among the many important differences in the two situations is that the policy recommendations in the *General Theory* assumed the existence of serious deflationary pressures, while the German officials were struggling with the control of inflation. Creation of additional money by the banking system might be expected to reduce the interest rate and thereby increase willingness to invest in the 1930's. But in Germany in the 1950's any sharp expansion of the money supply prior to an increase in the output

⁹ J. M. Keynes, *The General Theory of Employment, Interest and Money* (New York, 1936), p. 27.

Table 1. *German Investment and Employment, 1950-1961*

	<i>private investment (billions of DM)</i>	<i>GNP</i>	<i>index of employment (1958=100)</i>
1950	19.8	97.2	70
1951	23.8	118.6	75
1952	28.3	135.6	78
1953	27.9	145.5	81
1954	32.6	156.4	85
1955	42.1	178.3	90
1956	43.9	196.4	95
1957	46.2	213.6	99
1958	47.8	228.5	100
1959	53.8	247.9	104
1960	66.3	282.4	106
1961	72.9	310.4	109

Source: International Financial Statistics, Supplement to 1963/64 issues.

of goods and services could only lead to a renewal of inflationary pressures and a resultant rise, not a decline, in the interest rate. The surge of investment which was so essential for any German revival could clearly not be motivated by any monetary manipulation of the interest rate. Neither could bank expansion be used for financing any significant part of investment needs until after the revival of production was well under way.

The investment problem facing the planners for German recovery was not one of motivating entrepreneurs; rather, it was the question of how to secure an increase in the volume of capital goods by a limitation of demand for consumer goods without creating inflationary pressures or political instability. The Keynesian aggregate demand analysis clearly reveals the nature of the problem to be solved. Propensity to consume had to be held at such a level that private consumption, plus the necessary high level of private investment, would at all times equal, but not exceed, the output of goods and services available to the private economy. Levels both of consumption and of investment must, of course, be raised as the available supplies were increased by the recovery of production. Since both consumer demand and investment demand were urgent, the difficulties in planning involved the question

of how to exercise restraints on each type of demand so that the proper balance could be maintained within an aggregate demand which would keep productive factors effectively employed.

The primary limitation upon consumption was secured by management of the wage level. Once excessive liquidity had been removed by the monetary reform, the only significant source of funds for consumption expenditures by the majority of the population was the income from wages and salaries. Let us now turn to an examination of how West Germany was successful in maintaining a wage level which kept the propensity to consume under effective control.

It should not be thought that money wages in the years immediately following 1948 were completely stabilized, for the statistics clearly reveal a rather steady increase. During this period consumer and wholesale prices tended to move slowly upward and the general index of production rose rapidly. All that was necessary to secure a shift of resources into investment, therefore, was that wages should not increase much more rapidly than prices, for this would mean a very limited increase in real wages. If the rise in real wages could be minimized at the same time that production was increasing rapidly, the major part of the increased output would be available for some other segment of aggregate demand, in this case private investment.

One method used to secure this restricted rise in money wages was an appeal to the workers and their union leaders. The entire German population was united in its desire for rebuilding the economy. With the scarcity of resources it was clear that Germany could not in the near future have both a significantly higher standard of living and a high level of investment. The austere consumption level, which had been secured in such countries as the United Kingdom and Norway by rationing, was secured in Germany to a considerable degree by voluntary co-operation through limited wage demands by the workers.

While German labor and its leaders were willing to recognize the need for limiting wage increases in order to maximize investment, it should not be thought that they suddenly became convinced that the management of big business or the leaders of Adenauer's conservative Government could be trusted to watch after the interests of labor. In order to secure the co-operation of the workers in the limitation of wage increases they were promised "codetermination." European labor movements have traditionally been more oriented toward political and

social goals than toward direct bargaining for higher wages. The possibility of achieving for the unions a share in the management of business firms was, therefore, very attractive. The original plans for codetermination provided for giving labor an equal voice with the shareholders in managerial decisions. But in actual practice the labor members of the boards of directors of individual firms have not been able to exercise any significant degree of control. Instead, their presence as members of the managerial group has made it difficult for the unions to present their wage claims as vigorously as they otherwise would have done. The ultimate result was that through the proposal for codetermination the political leadership traded the pretense of a share in management for a very real restraint in demands for wage increases.

The socialistic dream of codetermination was, of course, not the only reason for the lack of an aggressive attitude toward wage demands on the part of the unions. The loss of a large part of their financial reserves by the monetary reform reduced the ability to pay strike benefits in the early period of recovery. Another important factor was the weakness at the polls of the political ally of the unions, the Social Democratic party. Upon the economic success of the German recovery Adenauer and Erhard built the political strength of the Christian Democratic party, which has kept the labor movement constantly on the defensive.

Another fortuitous circumstance used by these politically conservative economic planners has been the downward pressure upon the wage level exerted by changes in the labor supply. While casualties during the war significantly reduced the number of available workers, this shortage in Western Germany was more than offset by the tremendous influx of Germans from eastern Europe. In the early postwar period the migration came primarily from those areas turned over to Poland and from the Sudetenland sections of Czechoslovakia. A few years later the movement was largely from Communist-controlled East Germany. This movement of refugees was the major factor which caused the population of the Federal Republic to increase from about 39,000,000 in 1945 to 49,684,000 in 1954, and to 55,430,000 in 1963. While the increase of ten million people in the nine years immediately following the war and five million more in the later period was not composed entirely of persons who would be members of the labor force, an unusually large proportion was. Able-bodied persons find it much

easier to move under such extreme conditions than do the very young, the old, or the disabled.

The refugee migration caused a very serious unemployment problem until about 1951. Despite the tremendous job of reconstruction faced by Germany in this early postwar period, the materials and tools needed for rebuilding simply did not exist in adequate quantity. Another limiting factor was that after the monetary reform the banking authorities were conservative in providing credit for business expansion because of the fear that inflation, once started, would be difficult to control. Perhaps, however, the thought that a certain amount of unemployment would assist in restricting wage increases and limiting consumption expenditures may have occurred to the economists in the Adenauer Government. One thing certain about these earlier developments is that the expansion of the labor supply and the existence of a considerable body of unemployed did inhibit labor demands for wage increases until the expansion in production was well under way. With the recovery in full swing, it then became possible for the economy to provide both higher real wages and increased resources for investment.

The limitation upon wage increases not only freed resources by restricting consumption expenditures, but it also functioned as a means of providing the funds for business investment. Operating in a market which was almost insatiable in its demand for goods, business firms found their profits rising very rapidly as a result of favorable conditions in the labor market. Costs per unit of output were bound to decline as output per man-hour rose more rapidly than hourly wages. With a slowly rising price level and declining costs, business profits reached abnormally high levels.

It is not possible to get exact figures on business profits in Germany for this postwar period, but all authorities agree that they were very high. Mendershausen estimated that 58 per cent of gross investment in the period 1950-1952 was self-financed, while Wallich places the figure at 70 per cent or more for each of these years.¹⁰ It is probable that most of the statistics of corporate profits by German firms underestimate, rather than overestimate, the amounts involved. Accounting records in Germany are not standardized by law as they are in the United States, and wide latitude is permitted in the calculation and reporting of

¹⁰ Mendershausen, *op. cit.*, p. 74; Wallich, *op. cit.*, p. 154.

profit. A recent study of auditing standards in various European countries contained these significant comments:

In Germany corporations frequently report just enough profits to cover the dividend and hide the balance in various reserves. The picture is further complicated by the extremely high depreciation allowances which German companies show. . . . Siemens and Halske, the German manufacturer of electrical equipment, shows one hundred twenty four million dollars in a non-trusted "pension fund" on its balance sheet. Actually the company not only does not segregate the assets that will be used to meet its pension obligations, but uses the fund as a resting place for profits that can be employed in the business.¹¹

With such accounting practices generally accepted, it is obvious that even governmental statistics of business profits can be no more than estimates, and there is no reason to anticipate that an economically conservative Government would make the guess too high.

The Adenauer Government deliberately encouraged this internal financing of investment by business firms through provision for high depreciation allowances. At the time of the monetary reform business was allowed to revalue its assets, and many firms took the opportunity to write up values so that high annual depreciation write-offs could later be used to reduce corporate income taxes. Another method for reducing taxes on business, and thereby increasing profits, was the permission to deduct loans for housing, shipbuilding, and other special purposes from the taxable income. While the tax incentives were probably much less important than the wage policies in securing the internal financing of business investment, the governmental actions toward this end clearly revealed the recognition by the economic planners of the importance of this method of finance.

The success of the policy of financing large parts of the needed investment through plowed-back profits should not blind us to the fact that it resulted in some misallocation of resources. Many essential industries were not in a position to participate in the high level of profits for business in general. Such industries as steel, coal, railroads and electric power still had their prices controlled, and the result was that their profits were too low to finance needed investment. In order to overcome this shortage of funds in particular industries the Ade-

¹¹ Frank H. Mulling, "A Comparative Study of Auditing Standards in the United States and Western European Countries" (Doctoral dissertation, University of Alabama, 1964), p. 30.

nauer Government had recourse to a special investment assistance program with loans financed from assessments made upon the more fortunate industrial firms. Another important source of funds for industries without adequate internal financing was the counterpart derived from the sale of the goods provided by the operation of the Marshall Plan. The utilization of these funds under governmental control permitted a balance to be secured in over-all investment for the rebuilding of the German economy without the necessity for detailed controls to implement the general plan.

Earlier in this paper it was pointed out that widespread fear of inflation in the period following monetary reform prevented any significant reliance upon bank credit expansion for financing the investment program. This fear of inflation, however, did not prevent a steady increase in the money supply after 1950 as production began to rise. German governmental economists clearly recognized that an expansion in the quantity of money would not be inflationary, provided its effects were offset by an increase in the flow of goods and services. The relationship between changes in the quantity of money, prices, and the index of industrial production are clearly revealed in the following table:

Table 2. *German Money Supply and Prices, 1951-1963*

	<i>total money supply billion DM</i>	<i>indexes (1958-100)</i>			
		<i>industrial wholesale prices</i>	<i>cost of living</i>	<i>industrial production</i>	<i>wages</i>
1951	19.2	97	92	56	63
1952	21.3	100	94	66	68
1953	23.4	97	92	66	71
1954	26.5	96	92	74	73
1955	29.2	97	94	85	78
1956	31.3	99	96	92	86
1957	35.1	100	98	97	94
1958	39.7	100	100	100	100
1959	44.4	99	101	107	105
1960	47.4	100	102	119	115
1961	54.4	102	105	126	127
1962	58.0	103	109	132	142
1963	62.2	104	112	136	152

Source: International Financial Statistics, various issues.

When it is noted that the quantity of money in West Germany increased more than threefold between 1951 and 1963, the first thought is that such an expansion must certainly have led to serious inflationary pressures. But an examination of the price indexes shows an increase for the twelve years of only 7 per cent for wholesale industrial prices and 20 per cent for cost of living. An increase of less than 1 per cent a year in industrial prices and less than 2 per cent for cost of living certainly represents a high degree of price stability in an economy which was going through a period of such rapid growth. The reason for this stability is easily seen when the increase in the supply of money is compared with the rise in industrial production. Between 1951 and 1958 both the quantity of money and industrial output approximately doubled, with the rate of increase in circulating media only slightly exceeding that of physical output. This close correlation can scarcely have happened by chance; instead it reveals a deliberate monetary policy in which the money supply was carefully controlled to conform to the needs of the growing economy. Again we see demonstrated the utilization of one of the most important of the macroeconomic controls, the management of the monetary supply.

While this increase in the quantity of money represented a rather small part of the funds needed to finance the tremendous surge in German investment, it did provide a welcome addition to the funds made available from other sources. The fact that commercial banks in Germany have traditionally worked much more closely with the major industrial firms in their financial planning than has been the case in Britain or the United States made this expansion of bank credit more directly useful for industrial development than it would otherwise have been. Although the resumption of traditional co-operation between the large banks and the giant industrial combines clearly facilitated the rebuilding of productive capacity, it is probable that it also rebuilt a significant part of the monopolistic base for the German cartel system. Indeed it is quite clear that the economic planning under Adenauer placed a higher value upon the reconstruction of productive capacity than it did upon the creation of a competitive market system.

One price index in Table 2 which was clearly not stabilized was the wage level. As we have already noted, German wages were allowed to rise following the monetary reform, but the table reveals that between

1951 and 1960 the index of industrial production more than doubled while the increase in wage rates was definitely less than two-fold. Even after allowance is made for the increase in the number of workers during this period, it is apparent that a significant part of increased productivity was being made available to business for the internal financing of investment. At a later stage in this paper we shall make some comments about the more rapid rise in wage rates relative to industrial production following 1960.

These same economic policies, which resulted in a high level of domestic investment, also brought a volume of foreign investment which ultimately became embarrassing. The stabilization of unit production costs achieved through keeping wage increases below productivity increases not only served to increase business profits, it also limited the upward pressure upon the prices of industrial goods. At a time when many other nations, particularly in western Europe, were finding it difficult to restrain inflationary pressures this stability of costs made German goods increasingly competitive in world markets. Since the steel and machinery of the Ruhr were in strong demand during the reconstruction period in western Europe, German exports rose rapidly as industrial production recovered. At the same time the restrictions upon consumption imposed by the wage policy served to limit the increase in imported consumer goods. While visible trade was unfavorable for Germany from 1948 until about the middle of 1951, the deficit was covered primarily by Marshall Plan assistance. By 1952 Germany's shift to a trade surplus had not only eliminated the need for foreign aid, but was also rapidly rebuilding her foreign exchange and gold reserves. The following table shows the relevant figures regarding imports and exports as well as changes in reserves.

Although Germany's monetary and wage policies made her exports price competitive, the international co-operation of the OEEC under the leadership of the Marshall Plan opened the markets of western Europe to her goods. Nationalistic attitudes which had hampered the restoration of international trade after World War I were not allowed to interfere with economic reconstruction and development after World War II. The figures on exports reveal how rapidly Germany took advantage of the opportunities offered. It is no wonder that, having tasted the benefits of international co-operation in OEEC, EPU, and other such agencies, Germany was eager to participate later in the closer economic and political ties of the Coal and Steel

Table 3. *German Foreign Trade and Reserves, 1951-1962 (millions of U. S. dollars)*

	<i>exports</i> (<i>f.o.b.</i>)	<i>imports</i> (<i>c.i.f.</i>)	<i>federal</i> <i>banks</i> <i>gold</i>	<i>federal banks</i> <i>foreign</i> <i>exchange</i>
1951	3,463	3,491	28	427
1952	4,002	3,814	140	820
1953	4,389	3,771	325	1,411
1954	5,248	4,571	626	1,870
1955	6,135	5,793	920	2,014
1956	7,358	6,617	1,494	2,625
1957	8,575	7,542	2,541	2,573
1958	8,807	7,576	2,639	3,093
1959	9,086	8,482	2,637	1,896
1960	11,418	10,107	2,971	3,766
1961	12,690	10,948	3,664	2,877
1962	13,267	12,289	3,679	2,768

Source: International Financial Statistics, various issues.

Community and the Common Market. But participation in these efforts toward elimination of national restrictions upon economic development required the German government to make long-run economic plans. Her officials were required to submit estimates of production, anticipated changes in productive capacity, prospective import needs, proposed monetary policies, and all the other information which was essential in planning for international economic co-operation. As one conference followed another and the solution of each new set of problems led to another burst of economic growth, the political leadership of western Europe developed international economic planning to a degree which would have been inconceivable in 1945. The French and German rapprochement was only one of the miracles of co-operation achieved as a result of the economic development that began with the Marshall Plan.

Unfortunately, not all the countries of western Europe were able to duplicate the German success in securing price stability. France in particular seemed unable to control inflationary pressures, but she was not alone in her struggle against rising prices. One result of this failure to maintain the same general price level in the different countries can be seen in the rise of gold and foreign exchange holdings of the German Federal Bank. Within certain limits the rebuilding of reserves by Germany was essential, but as it continued year after year it

represented a reduction in the reserves of other nations (including the United States) below desirable levels. The German government attempted to deal with this problem by further reduction in import controls, adjusting interest rates, and even by a small revaluation of the *Deutsche* mark in 1961.

Although a serious crisis in foreign exchange markets has thus far been avoided, the need for greater co-ordination of central bank policies by the nations of the free world has become more and more apparent each year. Even within the more closely knit framework of the European Economic Community it has not as yet been possible to co-ordinate adequately the monetary policies of the various central banks. While Germany has not faced the problem of falling reserves, she has not escaped some of the penalties that go with international imbalance. The very rise in reserves has made it difficult to prevent a credit expansion which would be inflationary. The surplus in the balance of trade also represents a reduction in the volume of goods available to the economy, which has increased the inflationary pressure. About 1960 a definite rise in the price level began to be apparent.

Let us now turn to the recent changes in the position of the German economy which require a different set of policies if the successful planning of the recent past is to be continued. As Germany entered the decade of the 1960's she faced a new set of economic problems. The extremely high level of investment, which had been essential during the period of rebuilding after the war and provided the base for later growth, was no longer needed. There is a limit to the length of time a capitalistic economy will build large amounts of investment goods which are required only to produce still more investment goods. The ultimate purpose of investment must be production for the satisfaction of private and public consumption wants. But, as we have pointed out earlier, the plans of the Adenauer Government had been designed to maximize investment at the expense of consumption. Admirable as these wage and taxation policies had been in providing investment resources in the earlier period, they were, nevertheless, inappropriate at a time when economic balance required a rise in consumption relative to investment. Even before Chancellor Erhard replaced Adenauer at the head of the government of the Federal Republic, indications were appearing that the economic planners were trying to make the transition from high investment levels to a new balance between consumption and investment.

The need for this transition can easily be seen by the simple application of Keynes's theory of aggregate demand. Continued growth in German production could be secured only if the demand for private consumption, private investment, government purchases, and foreign trade justified this high output level. But other countries were already insisting that the foreign trade surplus must be reduced, and a leveling off of private investment could not long be avoided. If aggregate demand were to be adequate for the requirements of a full-employment, growing economy, it was essential that private consumption and government purchases be increased enough to avoid the development of a deflationary gap. In one of its recent reports the OECD expressed this view:

In 1961 and 1962, the expansionary forces emanating from business fixed investment and exports had been progressively weakening, leaving private consumption, dwelling construction and public expenditure to provide the main stimuli to the economy.¹²

When we look at Germany today, there are many indications that the high level of private consumption is being attained. Automobiles have rapidly replaced bicycles as the means of family transportation. Washing machines and refrigerators are becoming normal equipment in the typical household. Expenditures for vacation travel have risen so fast that it has been hard to provide the facilities for accommodating the tourists. While the German people demonstrated a willingness to accept a high level of saving when it was needed, the recent rise in living standards indicates that they were not fond of austerity for its own sake. Provided they are able to finance the purchases, there is no reason to doubt the willingness of the German consumers to fill the gap left by a leveling off of private investment and exports.

The increase of almost 50 per cent in the wage index between 1959 and 1963 is a clear indication that income from wages and salaries will provide a significant part of the financial base for consumption increases. That this increase in money wages represents an important increase in real wages is demonstrated by the fact that cost of living was rising only 11 per cent while money wages moved up almost five times as much. Another point to be noted in the prices shown in Table 2 is that the wage index moved up behind the rise in the index of industrial production from 1951 to 1960, but that after 1960 the rise in

¹² Organization for Economic Cooperation and Development, *Economic Surveys by the OECD: Germany* (Paris, Jan., 1964), p. 5.

the wage level was much more rapid than that of the production index. When we look at the compensation of employees as a percentage share of national income, we see that it moved from 60.8 per cent in 1960 to 64.4 per cent in 1963.¹³ These statistics indicate that the German economy is trying to adjust to a new allocation of its resources with consumption taking a larger share and corporate profits for internal financing a smaller one.

It is clear, however, that this attempt to adjust to the changed conditions in the German economy is imposing serious strains upon it. The most significant indication of stress is found in the recent upward movement of prices. The index of industrial wholesale prices stood at exactly the same point in 1960 as in 1952, but in the next three years it began a steady rise of slightly more than 1 per cent a year. As we have already noted, the cost of living index was rising at a rate of 3 per cent a year. While the amount of inflationary pressure is not as yet alarming, it is enough to indicate the need for careful planning of monetary and fiscal policies.

Let us now examine briefly the international aspects of economic planning by Germany. Her ability to adopt appropriate policies internally is definitely limited by the international obligations she has assumed, particularly in the European Economic Community. France and Italy have suffered from greater inflationary pressure than has the Federal Republic, but if prices are allowed to rise more rapidly in these partners of the Common Market than in Germany the trade balance is certain to be disturbed. Germany has already been running a trade surplus, and further distortion of prices among nations which are engaged in lowering trade barriers cannot help but increase this imbalance. Any consequent increase in German exports will add to her inflationary pressures and make more difficult her attempt to secure the necessary internal adjustments. The logical solution requires a control of inflation by the other partners in the Common Market, but the necessary fiscal and monetary policies must be made by political institutions over which Germany exercises no direct control. If strong upward movements of prices continue in France and Italy, Germany will be forced to choose among four unpleasant alternatives: (1) permitting her own prices to rise in step with her partners, (2) revaluation of her currency, (3) financing the deficits of her partners, or (4) imposing trade controls.

¹³ *Ibid.*, p. 35.

The experience of Western Germany with economic planning has some very clear lessons for other nations of the free world. Perhaps the most important is that it is possible for a politically democratic government successfully to combine the allocation device of a relatively free market with carefully chosen macroeconomic controls. Fifteen years of economic growth, relatively stable prices, and rising living standards may be too brief a period to prove final success, but it certainly provides reassuring evidence of the viability of democratic capitalism.

Another important lesson is that economic planning requires that the policies followed shall be appropriate to the situation in which they are used. There is no one answer to all the infinite problems posed by economic change. Wage and taxation policies designed to maximize investment were desirable in the decade of the 1950's, but they would be disastrous if carried unchanged into the 1960's. Successful economic planning involves the pragmatic assessment of each new situation as it arises, not the rigid application of a set of rules imposed by an outdated ideology. Economic clichés may be used by politicians in their public utterances, but they must not be allowed to interfere with the selection of policies dictated by the nature of new situations as they develop.

A comparison of the experiences in this most recent postwar period with that of the years from 1918 to 1939 carries a vivid lesson regarding the advantages of international co-operation and planning over extreme nationalism and unilateral economic action. The planning by international agencies in western Europe since 1945 was rewarded first by a period of rapid reconstruction and then by several years of almost incredible economic growth and rising living standards. It seems difficult to believe that political leadership could ignore in the near future these lessons in the economic benefits secured by the co-operative efforts of the nations of western Europe. Yet the very existence of economic prosperity has seemed recently to revive the spirit of nationalism. Effective planning for international economic advancement cannot be based upon the creation of exclusive national groups. The European Economic Community cannot avoid the consequences resulting from placing narrow national political advantage above international co-operation, as it appears to have done in its failure to admit Great Britain to membership.

But another lesson is emerging from the experiences of Germany and western Europe in the nature of international economic planning. It is

not a process which can easily be halted, once certain results have been attained. Each step in economic co-operation seems always to call for another. Economic growth required the development of broader markets by the elimination of national trade barriers. But the free movement of goods proved inadequate for the best use of resources, so the Common Market countries moved on to the free movement of capital and labor. This mobility of goods and productive factors is controlled by prices in the various markets. Unless these prices are co-ordinated by international decisions on monetary and fiscal policies, they will result in unbalanced trade and misallocation of resources. Yet the surrender of control over central banks and governmental budgets means giving up the essence of national independence. Economic growth under conditions of modern technology requires international co-operation, but this united planning of economic affairs can be implemented only by the surrender of political authority over certain areas vital to true national independence. Economic unification and political unification are not ultimately divisible.

Thus we may conclude that Germany's participation in the remarkable economic recovery of western Europe provides a valuable lesson in the advantages of planning and economic co-operation. The rapid growth in production and the widespread gains in living standards have once again demonstrated the vitality of democratic capitalism. The national income theories developed out of the *General Theory* appear to have given the political leadership of the free world the tools which were needed to make capitalism viable under the conditions prevailing in the middle of the twentieth century. If political leadership continues the imaginative policies and the spirit of international co-operation which have proved so successful in the past twenty years, capitalism should continue to demonstrate its ability to satisfy the economic needs of a dynamic society. As Germany demonstrated three decades ago the cost of failure to solve economic problems, it has in these postwar years been the outstanding illustration of the benefits of intelligent planning and international co-operation.

Robert S. Smith* *Agricultural Policy in the Central American Common Market*

A major problem in all common markets is the reconciliation of divergent national agricultural policies. Different levels of price support and subsidies and the use of quotas and embargoes impede the complete realization of free trade in agricultural products. Other national differences retard the introduction of a common tariff on agricultural imports from non-member countries, while unequal taxation of exports may also interfere with the complete integration of the agricultural sectors in an economic union. The Central American Common Market is no exception to the generalization that a common agricultural policy requires adjustments which cannot be made quickly, and some proposals to permit resources to be reallocated freely may be resisted indefinitely.

I

Five countries—Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua—are united under the General Treaty of Economic Integration signed at Managua in 1960. Unlike the Multilateral Free-Trade Treaty of 1958, which provided for intrazonal free trade in enumerated commodities, the General Treaty establishes free trade in principle and allows the partners to enumerate the exceptions.

Each country's exceptions to the rule of reciprocal free trade within the Common Market are set forth in Annex A of the General Treaty. In effect, the Annex consists of ten bilateral agreements¹—one for each

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¹ Since Costa Rica did not sign the General Treaty in 1960, its entry into the Common Market took the form of separate agreements with the other four countries, which were signed in 1962 and ratified in 1963. Thus, Annex A contains six bilateral agreements; the other four agreements are Costa Rica's exceptions to free trade with Nicaragua, Honduras, El Salvador, and Guatemala, respectively. See: CEPAL, *Informe del Comité de Cooperación Económica del Istmo Centroamericano* (E/CN. 12/552;1961); Costa Rica, Asamblea Legislativa, *Proyectos de ley de ratificación: Protocolo al Tratado General de Integración Económica Centroamericana* (1963).

pair of countries—which specify the articles on which tariffs may be retained or quotas enforced, either for a stated number of years or indefinitely. Cattle, rice, corn, flour, sugar, cotton, and fats and oils are the principal agricultural products affected by these restrictions. The following extracts from the four pacts to which Costa Rica is a party illustrate the extent and variety of these exceptional arrangements:

Cattle. In trading with Nicaragua, Costa Rica reserves the right to control exports and imports indefinitely; in the case of Honduras, import controls may be invoked for five years; but trade with Guatemala and El Salvador is unrestricted.

Rice. Free trade will become effective after four years. Meanwhile, quotas will limit trade with Guatemala and Honduras; export and import controls apply to trade with El Salvador; and import controls apply to Nicaragua.

Corn. Quotas and import and export controls are effective for four years, as in the case of rice. All of the ten bilateral agreements respecting corn and rice stipulate: "Within a period of not more than three years after the General Treaty becomes effective the contracting parties will sign a special agreement to regulate reciprocal trade, co-ordinate food supply policies, and insure the fullest freedom of trade."

Wheat flour. Costa Rica and the other four countries will retain their respective duties in intraregional trade "as long as the external tariffs on wheat and flour have not been equalized and a special agreement has not been signed to regulate reciprocal trade, co-ordinate production and supply policies, and insure the fullest freedom of trade."

Sugar. Control of imports indefinitely is the rule, although an annual quota is specified in the agreement with Honduras. All countries are pledged to negotiate a special agreement co-ordinating their foreign trade in sugar.

Coffee. Existing import and export duties remain in effect indefinitely.²

² Other agreements make special provisions for instant coffee: El Salvador, Guatemala, and Honduras allow a minimum quota of 14,000 kilos a year subject to an import duty of \$0.30 per kilo indefinitely. The Guatemala-Nicaragua agreement provides for free trade in the fourth year; while El Salvador and Nicaragua agree to a duty of \$0.50 per kilo, plus 10 per cent ad valorem.

Meat. In trading with Honduras and Nicaragua import duties will be reduced gradually and removed at the end of the fourth year.

Costa Rica's exceptions to free trade with the Common Market are most numerous, and the restrictions are most severe in trading with its nearest neighbor, Nicaragua. In addition to the limitations noted above, duties and quotas curtail the Costa Rica–Nicaragua trade in fruit and vegetable juices, vegetable oils, beans, leaf tobacco, eggs, fowl, fish, bakery products, margarine, tallow, and a few other foods and raw materials. Export controls on cottonseed are effective in Costa Rica's trade with Guatemala and Nicaragua, but Costa Rica's cotton trade with other countries is unhampered. Guatemala, El Salvador, and Nicaragua, in trading with each other, apply export or import controls on raw cotton indefinitely.

With important exceptions, such as coffee, cotton, and sugar, the ten bilateral pacts anticipate that the restrictions will be removed at the end of the Treaty's fourth or fifth year. Since the Treaty's fifth anniversary comes in June, 1966, it seems virtually certain that much intraregional trade will remain under tariff and quantitative controls after this date. The established patterns of production and trade, as the following discussion is intended to show, seem too rigid to permit more than a gradual reorientation of sources of supply and trade in agricultural products.

II

Central America both exports and imports foodstuffs and other agricultural staples. Contrary to the popular conception of the "Banana Republics," coffee and cotton are the leading exports of four countries. Furthermore, since the early 1950's the ratio of the three leading exports to all exports has been declining steadily: bananas, coffee, and cotton were 86.5 per cent of the value of all exports in 1956, but only 70.5 per cent in 1963. Although two commodities—coffee and bananas or coffee and cotton—account for more than half of every country's exports, diversification of production for export has made steady progress. Cotton in Guatemala has clearly replaced bananas as the second most important export. Exports of wood from Honduras are

growing and bid fair to capture second place in that country's export trade. Cattle, meat products, and seafoods (especially shrimp) are increasingly important exports of all the Common Market countries.³

With slight exaggeration Central America's agricultural problem may be reduced to one word: food. Clearly, the region's agricultural exports furnish enough foreign exchange to pay for imported food-stuffs. It is the failure of food production to increase as rapidly as population grows which plagues the makers of agricultural policy. The more foreign exchange is required to pay for imported food, the less is

Table 1. *All Imports and Imports of Food, 1963*

	<i>total imports (millions of dollars)</i>	<i>food imports</i>	<i>food imports from Central America (per cent)</i>
Costa Rica	123.8	11.4	7.9
El Salvador	151.7	24.5	52.7
Guatemala	165.5	19.8	21.7
Honduras	95.1	9.8	38.8
Nicaragua	110.8	9.2	16.3
Central America	646.9	74.7	31.2

Sources: SIECA, *Carta informativa*, No. 31, *Anexo estadístico*, No. 26; Costa Rica, *Comercio exterior de Costa Rica*, Año 1963; Honduras, *Comercio exterior de Honduras*, 1963; tomo II; El Salvador, *Anuario estadístico*, Volumen I: *Comercio exterior*, 1963, Nicaragua, *Memoria de la Recaudación General de Aduanas por 1963*.

available to finance imports of capital goods and raw materials to carry out industrial development plans. While agricultural improvement also depends on the availability of foreign exchange to import pure-bred livestock, fertilizer, tools, and farm machinery, the low level of food production is not primarily a balance-of-payments problem.⁴

Table 1 affords a measure of Central America's dependence on outside sources for food. The data refer to what the Permanent Secretariat of the Central American Economic Integration Treaty

³ SIECA, *Carta informativa*, *Anexo estadístico*, No. 38. In 1963 the United States imported from Central America \$7.5 million of shrimp, of which \$4.3 million came from El Salvador. Bureau of the Census, *United States Imports of Merchandise for Consumption: Commodity by Country of Origin, 1963*, pp. 17-20.

⁴ "Expansion of agricultural production," as Delwart observes, "will improve the balance of payments as much as a replacement of industrial imports; in addition, it will have the advantage of not reducing the productivity of the industrial sector." L. O. Delwart, *The Future of Latin American Exports to the United States* (Washington, 1960), p. 74.

(SIECA) classifies as food products; but animal feeds and fats and oils, not all of which are edible, are included. In 1963 reciprocal trade furnished Central America \$23.3 million of these commodities.⁵ All Central American imports from Central America rose from \$8.3 million in 1950 to \$66.2 million in 1963; but imports of foodstuffs, which made up nearly 50 per cent of the intrazonal trade in 1950, dropped to 35 per cent in 1963.

The capacity of the five countries to supply collectively the region's food requirements varies from commodity to commodity. Table 2 lists

Table 2. *Food Imports by Commodity Classes, 1963*

<i>NAUCA</i>	<i>all sources (millions of dollars)</i>	<i>from Central America amount per cent</i>	
00 livestock	5.4	4.2	77.7
01 meat	1.1	.3	27.3
02 dairy products	16.5	1.1	6.6
03 fish	1.8	.1	5.5
04 grain	27.7	3.7	13.4
05 fruits and vegetables	9.3	6.6	70.9
06 sugar	3.3	2.4	72.7
07 coffee, cocoa, and spices	1.6	.5	31.3
08 animal feed	3.7	.5	13.5
09 miscellaneous foodstuffs	4.7	2.2	46.8
41 animal and vegetable fats	6.2	1.7	27.4

Sources: Same as for Table 1.

the eleven two-digit classes of the Central American Uniform Customs Nomenclature (NAUCA) which constitute food products. The Common Market generally has net exports of live animals for food (00) but imports purebred livestock and other animals for breeding. Although exports of meat (01) are growing, various types of processed and packaged meat products come from abroad. The imports of dairy products (02) point up one of the region's most serious deficiencies. The shortages of seafoods (03) are largely specialty items: Costa Rica, for instance, imports a considerable tonnage of sardines.

Although Central America produces the major share of its fruits and vegetables (05), considerable quantities of dried and canned products and even some fresh fruits are imported. Each of the five countries

⁵ Preliminary data for 1964 show food imports of \$30.9 million, representing 29.3 per cent of the region's reciprocal trade of \$105.4 million.

exports sugar, so that the imports in class 06 are chiefly articles made with sugar. The commodities in class 07 include tea and spices, which are not produced regionally. There is little extraregional importation of cocoa and coffee.

The largest item in class 08 consists of feed for animals mixed with chemical and biological products. Cakes and flour made of oleaginous seeds and edible waste products are also significant extraregional imports. Class 09 includes substantial quantities of yeasts, margarine, and concentrated syrups for the preparation of soft drinks. Tallow is the most important import under class 41. Cottonseed oil is mainly an intraregional import, but soya, olive and palm oil come from other countries.

The grain trade (04) presents a special problem. Corn, rice, and beans (conventionally treated as a cereal) account for 60 to 70 per cent of all agricultural production for domestic markets. But per capita production of these staples has declined during the past decade, and the projected outputs per head for 1970 are 14 to 24 per cent less than in 1950-1954. Furthermore, according to the most exhaustive study of the food supply in Central America and Panama, there has developed "an evident qualitative impoverishment of the average diet," as corn, wheat, sorghum ("the poor man's corn"), and other hydrocarbonates have replaced the protein-rich bean.⁶

In the decade 1951-1960 Central America and Panama had net exports of corn in three years, but net imports for the ten-year period totaled 132,400 tons. There were also three years in which exports of rice exceeded imports, but over the decade net imports amounted to 31,400 tons. Export surpluses of beans were realized in two years; for the ten-year period net imports totaled 36,200 tons. Table 3 depicts the reciprocal trade in grain (but not beans) in 1963: it will be observed that El Salvador takes over 80 per cent of the imports and Honduras supplies over 70 per cent of the exports. Extraregional imports (the

⁶ SIECA, *Los granos básicos en Centroamérica y Panamá* (SIECA/IFE-IV/D.T.1-2; 1963). This two-volume study was prepared by experts drawn from ECLA, FAO, SIECA, and the Central American Economic Integration Bank.

The following estimates are given of per capita production in the six countries (in kilos):

	1950-51 1953-54 (average)	1970
corn	114.7	97.3
rice	15.2	13.1
beans	13.4	10.1

Table 3. *Reciprocal Trade in Grain, 1963 (metric tons)*

exporting country	importing country					
	Costa Rica	El Sal- vador	Guate- mala	Hon- duras	Nica- ragua	Central America
Costa Rica		277	49	0	4	330
El Salvador	8		1,256	2,770	492	4,526
Guatemala	30	1,274		22	7	1,333
Honduras	52	23,208	777		215	24,252
Nicaragua	46	2,901	200	267		3,414
Central America	136	27,660	2,282	3,059	718	33,855

Source: SIECA, *Carta informativa, Anexo estadístico*, No. 26. Grain consists of corn, wheat, and wheat flour, as well as comparatively small quantities of rye, oats, barley, and sorghum.

86.6 per cent "deficit" shown in Table 2) consist largely of wheat and flour from the United States and Canada.⁷

III

Central America lacks the equivalent of the Argentine Pampas or the Cauca Valley of Colombia; but it has resources which better farming, crop specialization, and a wider market would make more productive. As early as 1957 the Economic Commission for Latin America recommended the agricultural integration of Central America: "In a broad sense the program of economic integration . . . should try to attain the necessary transformation and future growth as if Central America were a single agricultural region."⁸ The idea has been reiterated at various meetings. One of the economists who participated in the First

⁷ ECLA, *Comercialización de granos en Centroamérica y Panamá* (E/CN.12/CCE/272; 1962), pp. 21-25; *Los granos básicos*, I, chap. iii, pp. 20-26.

Significant changes took place between the early and the late 1950's. Annual average imports rose, as follows:

	from Central America (tons)	other sources (tons)
corn		
1951-53	12,819	92
1958-60	22,528	5,670
rice		
1951-53	521	419
1958-60	2,397	9,077
beans		
1951-53	3,087	35
1958-60	9,154	1,162

⁸ *Estado general del programa de integración del Istmo Centro-Americano* (E/CN.12/CCE/71; 1957).

Seminar on Central American Economic Integration declared: "The basis of the zoning of integrated Central American production must in its practical aspect rest upon the principle of comparative costs. Only in this way would there be realized an undeniable advantage for all the people of the Isthmus, so long as production were carried on in specialized areas where costs are lowest."

Even if precise data on comparative costs were available, it is by no means certain that agreement could be reached on a rational "zoning" of agricultural production. A Salvadoran economist protested: "The encouragement of the growing of grain and of foodstuffs in general in the Central American areas which possess optimum conditions would have as an immediate result the seasonal unemployment of a large segment of the rural population of our country, with the consequent reduction of their level of income and living." In the opinion of Jaime Quezada, free trade would wipe out cereal production in El Salvador: cotton cultivation already usurps the best land, leaving only marginal land for corn and other food crops.⁹ The experts who prepared a "Basic Grains" study agreed that free trade under present conditions would cause "disturbances in the national markets."¹⁰

The most recent statistics of production and yields for the most important food crops—corn, rice, and beans—are shown in Table 4. Obviously, there is no correlation between output and the yield per hectare. We cannot be sure, for instance, that Honduras' high yield in producing rice could be sustained, if that country were to devote more land to rice production. El Salvador achieves the highest yield in raising corn, but this result is obtained by intensive cultivation of an acreage severely limited by the demands of cotton growing. Furthermore, it is not only comparative costs at the point of production that matter. Specialization and trade presuppose dependable means of transportation; and transport remains a major obstacle to economic

⁹ ODECA, *Integración económica de Centroamérica* (Guatemala, 1957), pp. 115-124. The Federation of Isthmian Grazing Groups advocates free trade in livestock but favors co-operation to avoid "ruinous competition" among grazers in the member countries. *Acta final de la Primera Conferencia de Ganaderos del Istmo Centroamericano* (San Salvador, 1960).

¹⁰ *Los granos básicos*, II, chap. vii, p. 11. Most Central American officials would second the observation of El Salvador's Minister of Agriculture and Grazing regarding the "imperious necessity of attaining full employment for our rural population, since at present our agriculture is incapable of absorbing the increasing number of those looking for work. . . . It is clear that the process of industrialization must be accelerated at higher rate than the demographic growth, if new opportunities for work are to be created for an increasing number of unemployed." *Informe de las labores realizadas por el poder ejecutivo en el ramo de agricultura y ganadería* (San Salvador, 1964), p. preface.

Table 4. *Production and Yield: Rice, Corn, and Beans, 1962-1963* (production: thousand tons—yield: kilos per hectare)

	rice		corn		beans	
	produc- tion	yield	produc- tion	yield	produc- tion	yield
Costa Rica	40	793	55	1,039	16	361
El Salvador	13	1,235	207	1,047	15	439
Guatemala *	13	1,398	518	828	33	643
Honduras	24	1,381	303	756	4	437
Nicaragua	23	970	125	863	29	629

* Data for 1961-1962.

Source: SIECA, *Carta informativa, Anexo estadístico*, No. 32. Yearly averages compiled for six countries (Central America and Panama) for 1951-1952 to 1960-1961 show the following variations in kilos per hectare: corn, 782 to 1,050; rice, 1,098 to 1,321; and beans, 493 to 638 (*Comercialización de granos en Centroamérica y Panamá*, pp. 9-15).

integration in general, despite significant improvements in road building since the inauguration of the Common Market in the 1950's.

Some evidence of the imperfect regional market is furnished by the monthly price series for corn, rice, and beans prepared by SIECA. Quotations are obtained from four markets in each country, but the data in Table 5 refer only to the capital cities. The range reflects wide seasonal variation, but the country-to-country differences are at least as marked: for instance, in January beans sold for 15 cents in Tegucigalpa, 17 cents in Managua, 21 cents in San José, 20 cents in Guatemala, and 26 cents in San Salvador. In June the maximum spread was reduced to 4 cents, but it rose to 13 cents in November. It is impossible to separate the respective influence on local prices of

Table 5. *Average Monthly Prices to Consumers, 1964 (cents per kilo)*

	San José	San Salvador	Guatemala	Tegucigalpa	Managua
<i>white corn</i>					
average	11	10	11	8	11
range	10-11	8-11	8-13	6-11	8-14
<i>red beans</i>					
average	24	24	23	19	20
range	21-29	18-30	20-29	15-24	16-26
<i>milled rice</i>					
average	27	25	25	20	22
range	25-29	21-26	24-26	16-27	22-23

Source: SIECA, *Carta informativa, Anexo estadístico*, No. 36.

imperfect market information, restrictions on imports and exports, and transportation costs. The fact that no country trusts the market mechanism alone to determine the price consumers pay for corn, rice, and beans is eminently clear. National policies tend to limit or prohibit imports from neighboring countries when the effect would be to depress prices below the support level. Similarly, export controls are invoked to prevent undue increases in the domestic prices.¹¹

Although much progress has been made in equalizing the external tariffs, discrepancies persist in the duties on agricultural imports from non-member countries. All countries admit free of duty purebred cattle; but nondescript cattle pays a uniform duty of \$7 per head, plus 10 per cent ad valorem. Beef is dutiable at the practically prohibitive rate of \$.60 per kilo, plus 10 per cent. Fresh milk and cream are taxed at \$.20 per kilo, plus 10 per cent, and \$.40 per kilo, plus 10 per cent, respectively. Other uniform rates are:¹²

	<i>specific</i> (per kilo)	<i>ad valorem</i> (per cent)
butter	\$0.60	10
eggs	.30	10
rice	.10	10
corn	.08	10
crackers	.80	30
fresh fruits	.30	25
beans	.10	8

For several important commodities agreement has been reached on duties to be equalized progressively. For instance, at the end of five years the uniform duty on condensed and evaporated milk will be \$0.10 per kilo, plus 10 per cent ad valorem. This is the same as the existing tariff in Costa Rica and Honduras, but it is lower than Nicaragua's tariff and higher than the duties imposed by Guatemala and El Salvador. Other commodities on which uniform duties will be reached

¹¹ For example: "a small corn crop in 1962 having been foreseen, the Minister of Economy and Finance (Honduras) established restrictions on exports to the El Salvador market. During the month of July this restriction was suspended in view of the arrival of the new crop." Honduras, Banco Nacional de Fomento, *Memoria*, 1962, p. 52. Costa Rica restricts exports of coconuts when food and soap industries complain of a shortage of vegetable oils. Costa Rica, Ministerio de Economía y Hacienda, *Memoria anual*, 1963, p. 134.

¹² SIECA, *Arancel de aduanas centroamericanas, 3a parte: Arancel centroamericano de importación*. Under the Protocol of San José the Executive Council of the General Treaty fixes import quotas for dried milk "so that Central American production and total imports insure the complete satisfaction of demand in each country." In case regional production is adequate, extraregional imports may be allowed up to 15 per cent of the estimated regional consumption. *Informe del Comité de Cooperación Económica del Istmo Centroamericano* (E/CN.12/672;1963).

over a period of years include cheese, soups and broths, fruit juices, lard, chocolate bonbons, sardines, and coconut oil.¹³

There remain a few important items on which each country will continue to apply its own tariff rates. Duties on wheat and flour, for instance, vary as follows:

	<i>wheat</i>		<i>flour</i>	
	<i>specific per kilo</i>	<i>ad valorem per cent</i>	<i>specific per kilo</i>	<i>ad valorem per cent</i>
Costa Rica	0	2	0	0
first grade			\$0.006	0
other grades			.06	4
El Salvador		<i>free</i>	.046	6
Guatemala	\$0.01	10	.08	10
Honduras	.015	0	.07	0
Nicaragua	.01	10	.03	10

Although El Salvador admits wheat duty free, spelt and maslin are taxed at \$0.04 per kilo, plus 6 per cent. Costa Rica, while levying a nominal duty on wheat, places a discriminatory tariff on inferior grades of wheat.¹⁴ Guatemala, Honduras, and Nicaragua impose moderate duties on all varieties of wheat but have protective duties—highest in the case of Guatemala—on flour. Guatemala not only protects its domestic milling industry but encourages the domestic production of wheat by limiting the proportion of imported wheat which may be used in milling flour. No other Central American country has resources to produce significant amounts of wheat.¹⁵

There are also wide differences in the national tariffs on a few other commodities, such as concentrates for the preparation of non-alcoholic beverages. Specific duties on tallow range from \$0.03 per kilo (Guatemala) to \$0.098 (Costa Rica), supplemented by ad valorem rates of 6 per cent (El Salvador and Nicaragua) to 10 per cent (Costa Rica and Guatemala).¹⁶

¹³ *Arancel de aduanas centroamericanas, 4a parte, Gravámenes a la importación equiparados en forma progresiva.*

¹⁴ According to the Costa Rican Minister of Economy and Finance, "we have continued to give full liberty to import flour and wheat, in contrast to the restrictive policy followed in former periods." *Memoria anual, 1963*, p. 134.

¹⁵ *Diario de Centro América* (June 8, 1961) refers to wheat production as "a national pride." Government assistance to wheat farmers—distribution of selected seed and support prices—is part of the "ascendant policy for wheat production." *Diario de Centro América*, July 20, 1961.

¹⁶ *Arancel de aduanas centroamericanas, 5a parte: Gravámenes a la importación vigentes en cada país para todos los rubros pendientes de equiparación.* In 1965 the Executive Council of the General Treaty heard the complaint of the cracker bakers in Honduras that their competitors had an unfair advantage because other countries had lower tariffs on flour. The Council recommended that Honduras lower its duties, pending a decision on uniform duties on imports of wheat and flour. SIECA, *Carta informativa*, No. 40.

The compound duties typical of the tariff equalization agreements have little meaning unless translated into effective ad valorem rates. The foreign-trade yearbooks of four countries record customs receipts, by country of origin, for every seven-digit import classification. (Nicaragua does not publish or compile comparable data.) Table 6 reduces the seven-digit data to the eleven two-digit food groups and shows tariff rates as measured by the duties collected on *dutiable* imports.

Average rates of duty do not, of course, furnish a completely satisfactory basis for making country-to-country comparisons. For one

Table 6. *Average Rates of Duty on Dutiable Food Imports, 1963 (customs dues collected as per cent of c.i.f. value)*

	Costa Rica	El Salvador	Guatemala *	Honduras
livestock	2.1	0	1.1	0
meat	83.2	66.2	81.7	75.4
dairy products	23.1	17.3	7.0	13.9
fish	45.1	40.5	60.9	73.2
grain	7.8	12.1	18.6	25.7
fruits and vegetables	95.8	96.8	77.9	89.5
sugar	123.1	16.5	42.0	11.3
coffee, cocoa, spices	51.1	52.9	58.6	59.7
animal feed	3.0	2.8	3.2	9.5
other foodstuffs	48.6	60.2	13.3	36.2
fats and oils	15.8	25.1	28.3	16.6

* For 1962 (the latest data available in 1965).

Source: Same as for Table 1.

thing, the proportion of dutiable imports in a given commodity group varies greatly. Costa Rica and Honduras tax over 90 per cent of all imports of dairy products, while El Salvador admits over 90 per cent duty free. Honduras' tariff on dutiable imports is lowest (13.9 per cent); Costa Rica's is highest (23.1 per cent). The product "mix" of a commodity group also differs from country to country. Thus, Costa Rica's tariff of 123 per cent on "sugar" results from the sumptuary taxation of relatively large imports of candy and other confections. When allowance is made for these and other factors which tend to distort the averages, many real differences remain. Costa Rica imported \$4.5 million of wheat flour at an average duty of 5.2 per cent; El Salvador taxed imports of \$359,000 at 33.1 per cent; and Honduras dutied \$475,000 worth at 56.9 per cent. On the other hand, El Salvador

admitted \$2.8 million of condensed, evaporated, and dry milk duty free, while Honduras taxed its imports (\$1.2 million) at 14 per cent and Costa Rica levied a duty of 36.4 per cent on imports of \$421,000.

IV

Generally the aims of agricultural integration in Central America are the same as those of the Common Agricultural Policy of the European Economic Community: "to increase agricultural productivity, to insure a fair standard of living for the agricultural population, to stabilize markets and guarantee regular supplies, and to insure reasonable prices for consumers."¹⁷ It is far from clear how these goals can be pursued congruently. A "fair" standard of living for the producers of corn may not be consistent with the needs of those who subsist on tortillas. The cry for agrarian reform presupposes that the price consumers pay for corn is not equitably divided between those who till the soil and those who own the land that produces corn. Furthermore, the expansion of agricultural output is not solely a function of stable markets or fair prices.

As a recent study of Central America argues: "It should be a major objective of development policy to raise agricultural productivity," but the "most promising avenues to agricultural progress in Central America are research and education."¹⁸ This position can hardly be challenged. On thousands of *milpas* and *fincas* backward methods of cultivation yield outputs barely sufficient to subsist the farm family. A relatively large share (72 per cent) of the region's rice production reaches the market; but an estimated 79 per cent of the sorghum, 58 per cent of the corn, and 48 per cent of the beans appear to be consumed by the producer.¹⁹

Whether education and research can be pushed forward fast enough to increase food production at the minimum rate predicated by Central America's extraordinarily high human fertility is an unanswerable question. As for education, the importance of regional integration has long been recognized, particularly by the Higher University Council (CSUCA), a permanent organization created by the Confederation of

¹⁷ U. S. Department of Agriculture, *Foreign Agriculture*, Nov. 16, 1964.

¹⁸ Committee for Economic Development, *Economic Development of Central America* (New York, 1964), p. 43.

¹⁹ *Los granos básicos*, I, chap. iv, p. 38.

Central American Universities in 1949. The Council's "Plan for Regional Integration of Higher Education" includes, among other goals, regional faculties in selected disciplines to replace separate (and often weak) faculties in each national university. Agreement has already been reached to make the Faculty of Veterinary Medicine of San Carlos University, Guatemala, a regional school for this subject.²⁰ Except in Costa Rica, the faculties of agronomy train too few agronomists and other experts, such as extension agents, to meet the needs of a growing, dispersed, and (in the case of Guatemala) indigenous population. Some progress has been made in meeting the need for practical instruction in agriculture below the university level. Costa Rica has seven *liceos agropecuarios*, of which five are state-supported, and Guatemala as well as El Salvador has a National School of Agriculture which gives a three-year course leading to the degree of expert agronomist. The private Pan American School of Agriculture in Honduras, which draws young men from rural areas throughout the Isthmus, also has a three-year program for the expert agronomist diploma.²¹

The perennial stumbling block to educational improvements is the inertia and apathy of an illiterate population.²² Numerous programs—national, regional, and international—are dedicated to wiping out this ancient scourge. Audio-visual instruction can be effective in rural communities; in the long run, however, the most productive farmer will be literate and able to assimilate information from all sources concerning crops and markets, the care and feeding of livestock, seeds and fertilizers, and other knowledge which in advanced countries makes farming scientific.

In addition to co-operation to raise educational standards, the Common Market needs "increased emphasis . . . on the regional approach to agricultural research."²³ Although the Inter-American Institute of Agricultural Sciences is located at Turrialba, Costa Rica, it is a Latin-American rather than a regional research center. This is not to say that it ignores Central America. With subsidies from the American Cocoa Research Institute and the United Fruit Company,

²⁰ CSUCA, *Boletín de la Secretaría Permanente*, various issues; ODECA, *Hacia la integración educacional de Centro América* (Guatemala, 1959).

²¹ CSUCA, *Estudio de recursos humanos en Centroamérica*, No. 1: *El Sistema educativo en Costa Rica* (Ciudad Universitaria, Costa Rica, 1964), pp. 51–52, and No. 2: *El Sistema educativo en Guatemala* (1964), pp. 70–71.

²² SIECA (*Carta informativa, Anexo estadístico*, No. 21) reports the completely illiterate as a percentage of the population of school age (1960), as follows: Costa Rica, 22.3; El Salvador, 51.8; Honduras, 59.2; Guatemala, 64.8; Nicaragua, 77.5.

²³ C.E.D., *Economic Development of Central America*, p. 43.

the Inter-American Institute has a long record of effective research on cocoa, a crop which is more important to Costa Rica than to the other members of the Common Market. The Central American University Institute for Social and Economic Research, a regional organization of CSUCA, has made extensive studies of land tenure and social and economic conditions in rural areas. With grants from UNESCO the Institute has underway investigations of "the impact of communication on rural development."²⁴ Assisted by the Rockefeller Foundation, all the Isthmian countries participate in the Corn Improvement Program. Rice research is one of the activities of the Costa Rican National Production Council, and in 1962-1963 the Council supplied 11,800 pounds of improved seed to Honduras and Guatemala.²⁵ Central America, Panama, and Mexico are members of the International Regional Organization for Farm Sanitation (OIRSA), which receives support from FAO and other agencies in co-ordinating national animal and plant protection laws and measures to control epizootics and migratory pests, especially the Mediterranean fruit fly.²⁶ Finally, reference may be made to the Central American Research Institute for Industry (ICAITI), a regional research center founded in Guatemala in 1956. Much of the Institute's work concerns the processing or "industrialization" of foodstuffs and other agricultural products. It has, for example, perfected an instant cornmeal for tortillas and furnished technical assistance to manufacturers of *incaparina*—the low-cost, high-protein meal developed in the laboratories of the Nutrition Institute for Central America and Panama (INCAP).²⁷

V

Five years ago the San Salvador *Diario de Hoy* (July 27, 1961) declared: "The idea of co-ordinating grain policy in Central America to put an end to the disorganization of the market and achieve stable

²⁴ "The efforts in this research are directed toward changing at least twenty practices in agriculture, animal husbandry, nutrition, education, health and hygiene, using in each one of the two groups selected different means of communication; one concentrating on the system of printed materials; the other making use of the rural radio assembly." CSUCA. *Boletín de la Secretaría Permanente*, No. 10, agosto, 1964. The results of a pilot study of the Cuenca del Río Coto Brus (Costa Rica) are published in *Un área rural en desarrollo: sus problemas económicos y sociales* (Ciudad Universitaria "Rodrigo Facio," 1964).

²⁵ Consejo Nacional de Producción, *Memoria*, 62-63, p. 10.

²⁶ Guatemala, Ministerio de Relaciones Exteriores, *Tratados y convenciones vigentes*, III (1960), 61-66.

²⁷ *Informe del Director del Instituto Centroamericano de Investigación y Tecnología Industrial, 1961-1962* (Guatemala, 1963).

earnings for the products and fair prices for consumers has gathered strength." The "strength" is still mostly in the realm of ideas. The fear of hunger paralyzes the planners; occasionally, too, they are dismayed by the prospect of destabilizing abundance.

Costa Rica, "one of the countries . . . with most experience in price regulation and market stabilization," has intervened in the corn, rice, and bean markets since 1937. The National Production Council sets guaranteed prices at the beginning of the crop year on the basis of "average cost of production." Surpluses, if the market is not cleared at prices above the guarantee, are purchased by the Council, stored, and eventually sold or distributed to welfare agencies. In recent years the Council has expanded its activities to experimentation with seeds and the promotion of agricultural mechanization. It is part-owner of the National Slaughterhouse, and it makes loans to "agricultural entrepreneurs of known moral solvency." In all its operations in 1961-1962 the Council had a deficit of 4.7 million *colones*, which officials described as not a "loss" but the "cost of a service rendered to all the people."²⁸

Similar institutes operate in the other four countries. In Nicaragua agricultural price-fixing is vested in the National Institute for Foreign and Domestic Trade. The Production Development Institute (IN-FOP) in Guatemala and the Institute for Control of Food Supply in El Salvador are responsible for pricing agricultural products to stimulate production. The National Development Bank in Honduras owns seventeen warehouses and administers a revolving fund to purchase agricultural staples during the harvest season.

Data covering four or five years (1957-1961) show that only Costa Rica has been successful in ironing out wide seasonal fluctuations in retail corn prices. The relative failure of the other stabilization institutes is attributed to their lack of funds to buy sufficient quantities of grain to affect prices; it is also possible that support prices were set too low to divert significant quantities of grain from the free market. In 1957-1961 government purchases of corn, rice, and beans averaged 20

²⁸ *Latin American Centre on Food and Agricultural Price Stabilization and Support Policies* (E/CN.12/527;1959); Consejo Nacional de Producción, *Memoria*, 62-63.

Apparently, the deficits would be larger if the Council were not also in control of the National Liquor Factory. Having contracted with the Milk Producer's Co-operative to buy surplus powdered skim milk, the Council appealed to the government to take over its mounting stocks to use in child nutrition programs. In 1963-1964 the Council agreed to buy dried milk only "up to a sum equivalent to six per cent of the annual gross sales of the National Liquor Factory."

per cent of the crops marketed in Costa Rica; but this figure dropped to 9.9 per cent in El Salvador, 3.3 per cent in Nicaragua, 1.5 per cent in Honduras, and .1 per cent in Guatemala.²⁹

Since 1958 representatives of the national price stabilization boards have met frequently to discuss co-ordination of national policies. In 1958, after reviewing preliminary FAO reports on the grain supply and the cattle and meat market in Central America, they voted to form a permanent Association of Production Development and Price Stabilization Bodies. It was agreed that co-operation was imperative to insure that when one country's food production (specifically corn, rice, or beans) fell short of its needs, it could count on another Common Market country to make up the deficit. The proposed association, so far as I can determine, did not materialize; but at a meeting of the stabilization officials in March, 1962, the Secretariat of the General Treaty, the Food and Agriculture Organization, and the Central American Economic Integration Bank agreed to constitute a working party to undertake "the most complete investigation possible of the grain supply." The result was a two-volume study entitled, "Basic Grains in Central America and Panama," which was delivered to delegates of the stabilization boards at a meeting in May, 1963.³⁰

In line with one of the recommendations of the working party, in September, 1963, the stabilization officials decided to create a permanent regional body, the Co-ordinating Commission for Marketing and Price Stabilization in Central America and Panama. The first task assigned the Commission was to fix national support prices for 1964-1965, adhering to the rule that differences in prices from market to market should be less than the cost of transportation between the respective capital cities.³¹

The Commission, made up of one delegate from each national stabilization office, met in February, 1964. Agreement was reached on

²⁹ SIECA, *Los granos básicos en Centroamérica y Panamá*, I, chap. iv, pp. 60-72; *Estructura y financiamiento de las plantas de almacenamiento y conservación de granos en Centroamérica* (E/CN.12/CCE/270;1963); *Progreso de los estudios sobre producción y mercadeo integrado de granos en Centroamérica* (E/CN.12/CCE/271;1963); Honduras Banco de Fomento Nacional, *Memoria, 1962*, pp. 50-51. Storage capacity (1962) as a percentage of production varied from 2.9 per cent in Honduras to 27.1 per cent in Costa Rica. The Costa Rican National Production Council has found that purchasing 20 per cent of the marketable crop is sufficient to hold prices at the desired level.

³⁰ SIECA, *Los granos básicos en Centroamérica y Panamá*; Guatemala, Instituto de Fomento de la Producción, *Memoria de la primera conferencia de organismos de fomento de la producción y estabilización de precios del Istmo Centroamericano* (Guatemala, n.d.); CEPAL, *Informe de la Organización de las Naciones Unidas para la Agricultura y Alimentación* (E/CN.12/CCE/269;1962).

³¹ SIECA, *Carta informativa*, No. 24.

the proper support prices at the producer level for corn, rice, and beans; and the following schedule was "recommended" to the appropriate national authorities:³²

	corn	rice (per hundredweight)	beans
San José	\$3.10-\$3.20	\$5.70	\$7.70
San Salvador	3.00- 3.20	5.62	
Guatemala	3.00- 3.20	4.25	
Tegucigalpa	3.10- 3.20	4.50	
Managua	2.53	4.00	5.10-5.53

There is no obvious explanation of the comparatively low level at which Nicaragua undertook to support producers' prices; but if free-market prices did not fall below the support prices, Nicaraguan sellers had little inducement to send corn to other countries. On the other hand, the price margins for rice and beans in Managua and San José left an apparent advantage in exporting from Nicaragua to Costa Rica.³³

After adopting the schedule of support prices, the Commission "resolved to request the governments to establish an adequate system of financing for the purchase of grain at guaranteed prices, preferably through the credit institutions of each state, in such a way as to permit the regulatory institutes to cover the total value of purchases in conformity with the minimum prices to be established." The "Basic Grains" report made estimates of the amount of money each country should devote to grain purchases: the estimates increase each year to a total of \$8.5 million in 1970. Despite the notorious underutilization of storage capacity in recent years, the experts proposed to build additional silos and elevators at a cost of \$5.5 million to increase capacity from 95,700 tons to 177,800. The maximum increase (242 per cent) was recommended for Guatemala, the country which had made least use of existing facilities in 1957-1961.³⁴

Concurrently with the meeting of the Co-ordinating Commission, the First Meeting of the Ministers of Agriculture and Grazing con-

³² SIECA, *Carta informativa*, No. 29. No prices for beans were fixed for El Salvador and Guatemala, but the delegate of Honduras said the Banco Nacional de Fomento would probably hold the minimum price at \$6.00 per quintal. The El Salvador delegate observed that the corn and rice prices would be maintained if the Instituto Reguladora de Abastecimientos secured funds for grain purchases.

³³ Managua and San José are connected by 450 kilometers of all-weather road. The maximum cost of transport is put at \$.93 per cwt. (*Los granos básicos*, I, chap. iv, p. 52.)

³⁴ *Ibid.*, pp. 66-72.

vened in Guatemala. The officials reviewed the progress of negotiations to organize the Honduran-Salvadoran Institute, which they thought could be "the embryo of a future regional organism" for price control and stabilization. It was argued that the success of this Institute was assured by "the high degree of complementarity in their respective economies." Other matters debated at this reunion included the urgent need for crop specialization on a regional scale; the industrialization of agricultural products; uniform commercial policy in foreign trade; and the urgency of promoting educational programs and the training of personnel at all levels in the agricultural sector. The meeting ended with the approval of resolutions commending the price stabilization authorities for their efforts to co-ordinate the national support prices for purchases of grain and approving plans to construct a regional network of granaries. The agricultural ministers also resolved to ask SIECA and ECLA to draft an agreement on regional grain policy, as provided for in the General Treaty.³⁵

The Economic Co-operation Committee of the Central America Isthmus, since 1952 the principal body concerned with economic integration, established a Subcommittee on the Economic Development of Agriculture and Grazing in 1961; but the subcommittee did not hold its first meeting until late in 1964. Its deliberations resulted in two lengthy resolutions, embodying the following recommendations:

1. Negotiations to eliminate restrictions on regional free trade in tobacco, cattle, cheese, cotton, and sugar. In the case of sugar, Central American exporters should present a united front on the international sugar market. A uniform genealogical register of livestock was recommended as a preliminary step toward regional free trade, and a Central American policy for extraregional exports of meat was considered desirable.
2. Uniform classification of cotton and coffee and co-ordination of national export policies.
3. Co-ordination of national programs for growing improved varieties of corn, rice, beans, and sorghum.
4. Uniform legislation and regulations governing animal and vegetable sanitation.
5. The widest possible exchange of information among agricultural research centers.

³⁵ SIECA, *Carta informativa*, No. 29.

6. Implementation of specific agricultural projects (1965) along regional lines, as proposed by the Joint Programming Mission for Central America.³⁶

One of the prerequisites of free regional trade is reliable information about the quantities and quality of marketable products. Considerable progress has been made in substituting the metric system for heterogeneous regional standards, although the *quintal* (46 kilograms) is still the most common weight for grain.³⁷

In 1959 the Economic Co-operation Committee convened a conference of experts on grain classifications and marketing to examine technical reports prepared by FAO. One result of the meeting was the introduction of systematic collection and publication of grain prices, such as those shown in Table 5. The proposed classification scheme was adopted for transactions among the national stabilization boards but was considered "too strict" to enforce in all transactions, at least until a larger number of grain classifiers had been trained. The objection was also raised that the accurate classification of corn, rice, and beans—taking into account color, size, moisture content, cleanliness, and other characteristics—required more costly equipment than the grain boards could afford.³⁸

In October, 1964, the Permanent Secretariat of the General Treaty sponsored a Seminar on Agricultural Statistics, at which officials of the Isthmian statistical bureaus and the departments of agriculture recommended a number of improvements in the collection of agricultural statistics. The expressed objective was "uniformity in the publication of statistical data by means of similar tabulation for the six countries."

VI

If organization and conferences were all that is required to solve problems, Central America would be integrated without delay. Admittedly, the problems are complex; but an outsider may wonder whether too many committees, institutes, and councils are not covering much the same ground in search of solutions which may remain intractable

³⁶ SIECA, *Carta informativa*, No. 37, *Informe del Grupo de Trabajo para el estudio del abastecimiento de granos en Centro América y Panamá* (E/CN.12/CCE/273;1963).

³⁷ SIECA, *Carta informativa*, No. 37.

³⁸ *Informe de la reunión de expertos sobre clasificación de granos e intercambio de información de mercados* (E/CN.12/CCE/171;1959).

for many years to come. The barriers to free trade have to be removed by international agreements; taking into account the fact that some questions have not yet reached the stage of a draft protocol, it seems unlikely that complete integration of the agricultural sectors will be realized in 1966.

In 1964 the Secretary-General of SIECA declared: "It must be admitted that in the agricultural sector great progress has not been made; in any case this is explained by the Central American situation and the complexity of dealing with agricultural problems, even in other regions of the world with greater financial and technical resources."³⁹ Doubtless he had in mind the European Common Market. The long and sometimes bitter struggle of the European Economic Community to unify agricultural policy reached a climax with the acceptance of the "Mansholt Plan"; but the new "target prices" will not go into effect until 1967-1968.⁴⁰ By any reasonable standard of comparison the progress of Central America toward agricultural integration has been commendable.

³⁹ SIECA, *Carta informativa*, No. 37; *Informe sobre los avances del programa de integración económica centroamericana, octubre 1963-noviembre 1964* (Guatemala, 1964).

⁴⁰ European Community Information Service, *European Community Bulletin*, No. 76 (Nov.-Dec., 1964); *Foreign Agriculture*, Jan. 11, 1965.

Craufurd D. Goodwin* *The Transfer of Economic Ideas in the Commonwealth*

During the nineteenth century Great Britain became the metropolis for development of a major portion of the globe known then as the British Empire and subsequently as the British Commonwealth. Britain provided its dependencies capital, trained personnel, technology, and a variety of social forms. This essay is concerned with the transfer from Britain of economic ideas: tools for analyzing economic problems, notions about the proper form for economic institutions, and doctrine concerning public economic policy. In a sense economic ideas were one important aspect of the total importation of technology, and like other techniques, they both influenced and were influenced by events of the time. The ideas examined here cannot always be considered the creations of identifiable individual economists in the old world, or even of schools of thought. They were part of the culture of one country brought to another. The significant consideration for this study of transfer is not the origin and growth of ideas in their birthplace, for usually colonists themselves were ignorant or mistaken on this matter, but rather the movement of ideas across broad stretches of space and the evolution of thought systems in a new environment.¹

The raw material for this comparative treatment of the transfer process of economic ideas to three different parts of the Commonwealth is contained in studies I have carried out of the development of economic ideas in Canada, Australia, and the Gold Coast and Sierra Leone in West Africa.² These investigations, which terminate prior to

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¹ A broader survey of the spread of economic ideas throughout the Commonwealth, with an analysis of some of the theoretical implications, is J. J. Spengler, "The International Diffusion of Economic Ideas within the Commonwealth," in W. B. Hamilton, Kenneth Robinson, and Craufurd D. Goodwin, eds., *A Decade of the Commonwealth, 1955-1964* (Durham, N. C., 1965), pp. 211-235. A discussion of the "International Flow of Economic Ideas" took place at the December, 1954, meetings of the American Economic Association, with contributions dealing mainly with flows between more developed economies by T. W. Hutchison, Joseph Dorfman, J. M. Letiche, George H. Hildebrand, and William Jaffe, *American Economic Review*, XLV (May, 1955), 1-39.

² Craufurd D. Goodwin, *Canadian Economic Thought* (Durham, N. C., 1961); *Economic Enquiry in Australia* (Durham, N. C., 1966); and articles forthcoming on economic ideas in West Africa. The term "colony" is used in this paper in the broadest sense as "a distant territory dependent on a ruling power."

the depression of the 1930's, contain descriptions of the major economic discussions of the time, the development of economic science in each country, and the few major contributions which were made by colonists to the discipline. The studies reveal that although in the three situations the origins of ideas were nearly identical, the conditions of transfer were markedly different, and the resulting patterns of evolution were very dissimilar. In the first section of this essay, transmission media for the transfer of economic ideas throughout the Commonwealth are examined; in the second, the impact of imported ideas on colonial economic policy discussion is described; and in the final section, the flowering of economic science in the new environments is outlined together with the few distinguished theoretical innovations which were made in these developing areas. Some of the generalized causal relationships suggested in this essay cannot be documented definitively and must be regarded mainly as suggestive hypotheses.

I

Emigrants from Britain were the most important single means whereby economic ideas moved outward from the metropolis. In general, an emigrant's land of destination and reason for migrating determined his effectiveness as a transmission agent. The most significant distinction as to destination was between what is now called the "Old" and the "New" Commonwealths. Reasons for this distinction are at least two. First, all categories of British emigrants tended to view residence as more likely to be permanent in either Canada or Australia than in West Africa, and as a result they were inclined to be more interested in and sympathetic to distinctly local problems of these future dominions than of those of West Africa. In the congenial environments of the temperate colonies the esprit de corps and intellectual enthusiasm of the emigrants grew as their numbers increased. Australian and Canadian settlers had often been accustomed to consider seriously economic questions before their departure from Britain, and it was only natural for them to employ this experience in their new home. Moreover, because Australians and Canadians brought with them many aspects of their native culture, they had only to adapt themselves and their tools of analysis to a changed physical environment. They quickly obliterated or ignored the indigenous inhabitants. In West Africa, in sharp contrast, Britons found that they

were always a small minority and that the culture of the vast aboriginal majority was not only unfamiliar but was both resistant to change and distasteful in many of its aspects, including such vital economic institutions as slavery. Only the most astute British newcomers to Africa resisted the temptation wholly to reject and ridicule what they saw and to view solution of all social problems as a mere process of adaptation to their own mores.

A second reason for distinction between types of emigrants according to destination was climate. Before the development of modern drugs and physical conveniences of living, the West African climate dissuaded most potential emigrants and terrified and enervated those who did come. Extraordinarily high mortality in early colonization efforts resulted in discouragement of further attempts at white settlement, and the general pessimistic attitude associated with this policy was not conducive to serious economic inquiry into development problems instigated either from Britain or on the spot. In contrast to this situation in West Africa, the climate and economic challenge of Australia and Canada usually gave new mental and physical vigor to emigrants from the old world.

Civil servants, merchants, clerics, and settlers seeking a better life in new surroundings were the major categories of emigrant relevant for analysis of this passage of ideas. Civil servants who went from Britain to the colonies were particularly important carriers of economic ideas; their thought is incorporated in government reports, debates, public controversy, and actual legislation and administrative decisions. In the future dominions throughout the nineteenth century, a succession of senior colonial civil servants were active publicists of economic doctrine: they organized societies and publications for disseminating economic knowledge, encouraged collection of statistics, took firm positions of principle on important economic policies, and generally acted as strong catalysts in the development of economic inquiry. The explanation of this phenomenon lies partly in the structure of British society, which directed promising intellectuals into imperial service abroad. It can be explained also by the happy circumstances in which most Australian and Canadian administrators found themselves; a favored physical environment with exciting economic prospects and a skilled population predominantly of their own nationality gave them unquestioned opportunities for imaginative leadership during a period when democracy was only beginning to complicate the job of adminis-

tration. However, intellectually active colonial administrators were reserved mainly for the temperate areas. West Africa was not a region to which promising officials often were sent; risk of their mortality was high and the situation was believed not to require the most distinguished talent, at least for the formulation of social policy. Administrators in West Africa frequently were military men or patronage appointments to the Colonial Office, and they themselves often regarded their period of residence as unfortunate, temporary, and an affront to their supposed abilities. Ironically, whereas the greatest talents were required in Africa to overcome formidable obstacles to effective administration, the least able administrators often were sent.³ Certainly, until the administration of Guggisberg in the Gold Coast in the 1920's, West Africa did not receive as governors any energetic amateur social scientists approaching in stature Sir William Denison and Sir Anthony Musgrave in Australia or Lord Sydenham and Lord Durham in Canada. Seldom during the period under study was West Africa viewed by its governors in the same way as were Australia and Canada by several of theirs, as both an extension of Britain across the ocean and an interesting laboratory of social experiment.

Attitudes of emigrant merchants toward economic problems of their colony of residence were in some ways similar to and in other ways different from those of government administrators. Merchants of British origin in both Canada and Australia, like the civil servants, developed a strong empathy for their new environments, and they too became an important focus for economic inquiry. Although the majority of merchants probably came initially with the intention of pursuing a short-term entrepôt trade, they soon were involved intimately with the process of production and took a strong hand in the formulation of broad economic policies. As frequent travelers to and from the home country, merchants reported debates and contributions to economic science in Britain; they urged the collection of local statistics, and in some instances they gathered and processed valuable information themselves.⁴ As merchants became involved increasingly

³ A representative contemptuous work by a former colonial servant is William Whitaker Shreeve, *Sierra Leone: The Principal British Colony on the Western Coast of Africa* (London, 1847). A brief discussion of the colonial service before 1914 is contained in Robert Heussler, *Yesterday's Rulers* (Syracuse, 1963), pp. 1-26.

⁴ For example, see particularly the achievements in Canada of Isaac Buchanan, Alexander Galt, and John Young (*Canadian Economic Thought*, pp. 49-51, 55-56, 61, 82-83, and 113-114). See also the work in Australia of William Westgarth (*Economic Enquiry in Australia*, pp. 468-469 and *passim*).

in fundamental aspects of economic life, they encouraged agricultural and manufacturing growth, fostered banking and transport enterprise, and came to oversee vertically the development of staple trades; they published journals, wrote books and pamphlets, formed primitive government lobbies and trade associations for which propaganda was required, and undertook a wide variety of other activities which had impact on the intellectual life of the communities. As one of the few groups in the pioneer societies with sufficient time, wealth, contacts, literary experience, and perspective to reflect on social and economic problems, the merchants loomed large in the development of colonial social science.

In West Africa, British merchants had a much less active intellectual role than in the temperate colonies. In the first place, they tended more to be mere transient representatives of British firms, and with their imminent return home always in mind, they came naturally to identify their personal interests with those of their country of origin rather than residence. Their objectives were immediate gain rather than long-run profits, and they seldom expressed concern about long-term productive development. In the second place, British merchants in Africa came into conflict frequently with the indigenous inhabitants, both as customers and as competitors, and they were seldom successful in understanding or sympathizing with the novel African cultures. Intermittent military conflict between merchants and natives contributed to the climate of hostility and posed an additional barrier to over-all intellectual leadership by the immigrant business community. Merchant writings on Africa were seldom more than diatribes against the inconveniences and differences of the new environment or paeans in favor of commerce as a civilizing (i.e., Anglicizing) force.⁵ Merchants in Africa did not, as did their colleagues in Australia and Canada, produce penetrating analyses of their surroundings or otherwise provide much enlightened guidance for action.

British clerics who migrated to Canada and Australia differed markedly in character and activity from those who went to West Africa. In general, clergymen in the future dominions identified themselves closely with the customs, values, and objectives of the communities to which they came. Often their energies were directed far from the

⁵ For example, G. A. Robertson, *Notes on Africa: Particularly Those Parts Which are Situated between Cape Verd and the River Congo* (London, 1819), Colin Graham-Rosenbush, *Sierra Leone: Its Commercial Position and Prospects* (London, 1881).

customary tasks of pastoral guidance, and they became among other things educational and political leaders, pioneer statisticians, energetic teachers of economics, and even contentious and aggressive entrepreneurs.⁶ The close association in Britain of political economy with such distinguished clerics as Archbishop Whately and T. R. Malthus gave respectability to the economic interests of clergymen in the colonies. In addition, the implicit basic tenets of the classical economic model were particularly agreeable to these nineteenth-century interpreters of Christian doctrine; they viewed distributive rewards according to constructive effort and maximum liberty for the individual not only as essential to economic organization, but also as fundamental ethical principles. Colonial divines reasoned that the structure of the economy was closely related to morality and that therefore pursuit of economic inquiry was well within their legitimate purview. As members of a relatively small educated elite in an age before the compartmentalizing of knowledge, clergymen were accepted readily as experts on a wide range of economic topics.

In contrast to their brethren in the temperate colonies who brought with them flocks already converted and therefore could be released for other pursuits, clerics in West Africa almost without exception were ardent missionaries whose single objective was to evangelize the aborigines. Their main task was a struggle for survival among indifferent or hostile parishioners, and they had little time for other goals. Most West African missionaries had only contempt and loathing for the social mores and economic institutions of their congregations, and like the merchants, they tended to favor "civilizing" the natives (meaning making them more like themselves) as a means of proselytizing them. However, the missionaries faced a dilemma; they feared that premature incursion of the European economy might corrupt and materialize Africans before their salvation had been assured. In general they took a safe approach to this paradox and confined their own energies most directly to matters of the spirit, taking small part in the transmission or spread of economic ideas. In West Africa contributions by emigrant clerics to economic analysis and an understanding of native economic institutions was negligible, while their dampening

⁶ See for example the significance to the development of economics in Canada of the career of Bishop Strachan and the work of Abbé Baillairgé (*Canadian Economic Thought*, pp. 7 and 193-6) and the labors in economics in Australia of the protestant clergymen John Dunmore Lang, Henry Carmichael, and Ralph Mansfield (*Economic Enquiry in Australia, passim*).

influence upon inquiry by the natives themselves may have been considerable. Leadership from the church in economic debate during the nineteenth century was conspicuously absent in West Africa, whereas it was in full flower elsewhere in the Empire.⁷

The character and activity of emigrants who left Britain not as administrators, merchants, or clerics, but simply as settlers seeking a better life in a new land varied also among the colonies to which they went. Canada obtained its first surge of English-speaking population at the time of the American Revolution and quickly became known as a haven for loyal yeomen who wished to settle on small farms or engage in minor supporting activities to the basic staple trades. After the decline of the fur trade early in the nineteenth century, Canada developed no exotic enterprise to attract the romantic adventurer; nor did the economy lend itself to plantation agriculture, which might have drawn and supported the intellectual aristocrat with leisure for genteel occupations. Canada became predominantly the land of the middle class in which most emigrants of any intellectual competence and ability disappeared quickly either westward or on to remote farms in the eastern and central provinces where stimulation was slight and opportunities few for economic investigation. The country produced no equivalents to Thomas Jefferson and Alexander Hamilton on the one hand or to the Chartists or Populists on the other. The major towns remained dominated by a relatively conservative, mercantile hierarchy devoted with intense single-mindedness to production and sale of the staple commodities and opposed to radicalism in almost any form.⁸ Many of the more intellectually energetic and restive settlers in Canada, like Simon Newcomb in Nova Scotia, moved across the border to the United States as soon as they could afford the ticket. In some years during the nineteenth century, the southward flow from Canada matched the intake across the Atlantic, and it can be imagined that this transformation resulted in a net loss of persons who thus avoided facing

⁷ Works by early African missionaries in which some economic comment appeared were: D. J. East, *Western Africa; Its Condition, and Christianity the Means of Its Recovery* (London, 1844), William Fox, *The Western Coast of Africa* (London, 1851), and Samuel A. Walker, *Missions in Western Africa* (Dublin, 1845). The so-called "gospel of the clean shirt" is discussed by M. J. Herskovits, *The Human Factor in Changing Africa* (London, 1962), pp. 205-206.

⁸ John Langton was one typical promising settler in Canada who was cut off from intellectual stimulus and convenient modes of expression. (See *Canadian Economic Thought*, p. 91.) Dominance of the Canadian mercantile community is recounted in the classic work by D. G. Creighton, *The Commercial Empire of the St. Lawrence, 1760-1850* (Toronto, 1937). Canadian economic development is outlined in W. T. Easterbrook and Hugh G. J. Aitken, *Canadian Economic History* (Toronto, 1956).

problems which, if living in a more constricted situation, they might have helped to analyze and solve. But the United States did more than attract potential economists from Canada; it also inspired a paranoia and concern with national viability which successfully detracted for more than a century from the legitimate economic problems of the country. Economic inquiry of high quality was undertaken occasionally by early Canadians, but it was inhibited more than encouraged by the economic system. The performance of John Rae, Robert Gourlay, and a few others was a reaction to conditions they faced and took place in spite of their personal circumstances.

In Australia conditions which attracted and greeted emigrants were far more stimulating to economic inquiry than were those in Canada. Although most settlers were drawn to the new continent by the exciting promise of bountiful free land or the lure of gold, few obtained either goal, and the large majority were forced to congregate in several thriving cities on the south coast of the continent. Here they pondered their economic enigma, generated an active intellectual life, and carried on vigorous discussions of economic reform. Their number contained a remarkable collection of intelligent and imaginative Britons with strong interests in economic investigation. These included men of future distinction in public life elsewhere in the Empire who came to cut their professional teeth in the Australian colonies (e.g., Robert Lowe, Hugh Childers, Henry Chapman, and W. S. Jevons), disillusioned radicals who hoped to achieve in the fresh air of the new world what they had missed in the old (e.g., Charles Gavan Duffy, Charles H. Pearson, and Tom Mann), and miscellaneous energetic individuals of little social station or education who would probably never have emerged in more static circumstances but who rose to prominence in the fluid environment of rapid economic change and vigorous social controversy (e.g., Henry Parkes and R. M. Johnston).⁹ The large numbers of emigrants to Australia who professed interest in economic inquiry acted as catalysts for each other; they also inspired later generations of followers with similar sympathies.

Apart from a few early utopian reformers such as Granville Sharp who hoped to give expression to their preconceived economic plans in the colonies,¹⁰ British West Africa did not attract many unofficial

⁹ *Economic Enquiry in Australia*, *passim*.

¹⁰ Sharp's ideas were set forth in *A Short Sketch of Temporary Regulations (Until Better Shall be Proposed) for the Intended Settlement on the Grain Coast of Africa, Near Sierra Leona* (3rd ed.; London, 1788).

emigrants who were of a reflective turn of mind. Those of this type who did come found that the ethos of the small transplanted English community, characterized by intellectual malaise and scorn for African neighbors, was not designed to stimulate and encourage creative thought.

Educational institutions were the second major medium whereby economic ideas spread throughout the Commonwealth. In West Africa the importance of this factor was slight. Although political economy was taught nominally in some secondary schools and at Fourah Bay College, Freetown, the impact of the teaching was negligible. To the extent that the British did provide education beyond the elementary level, it was organized usually by the church and was aimed toward the production of native clerics and junior civil servants. Curricula were oriented heavily on the one hand toward religious training, and on the other toward basic administrative practices; educational policy reflected a prevailing attitude that Africans should be prepared only for low level positions in the church, public service, or commerce, and even then in small numbers. They were not to be equipped for leadership roles in which such a science as political economy would be useful. The administrative policy of indirect rule did not call for the presence of sophisticated African politicians, and in fact, it implicitly discouraged them. To the extent that they were familiar with economic doctrine West African writers who were educated locally seem generally to have come by this knowledge either through independent reading or indirectly through study of the law.

Canada and Australia both formed their institutions of higher learning during the first three quarters of the nineteenth century, a period when the Scottish and Irish universities were at their peak. In part as a result of this timing, and in part because of the national origins of many early settlers, the beginning faculty members were recruited largely from Scottish and Irish sources, and they adopted the Scottish pattern of university organization with heavy emphasis on departmental and faculty divisions rather than college allegiance. This model grew and prospered in the new climates and assured strength to many of the pioneer academic disciplines during their times of trial. Scotch and Irish graduates in political economy, such as Hearn at Melbourne, Shortt at Queen's, and Davidson at New Brunswick, guaranteed perpetuation of a modified Scotch-Irish tradition and continued attention to the central core of political economy. Naturally

the influence of English academics and their institutions was never absent in Canada and Australia, and as time went on the impact grew also of American and continental ideas, particularly preoccupation with historical and growth phenomena.

The actual process of transferring economic ideas by way of Australian and Canadian universities began with the simple repetition in classrooms of conventional "principles" of political economy, supplemented by a few half-hearted attempts to provide domestic illustrations. The pioneer academics also took upon themselves the exposition of elementary economic theory in the local press, periodicals, public meetings, and before any other audience which would listen. The early proponents of economics in the universities seldom were professional economists but rather were primarily lawyers, philosophers, historians, theologians, mathematicians, and practitioners of almost every other subject taught. In some ways these enthusiastic amateurs brought freshness and breadth of perspective to economics; in other ways they made it diffuse and weak. The early manner of economics teaching in Australia and Canada did not encourage numerous original contributions to the literature; Hearn's outstanding *Plutology* written at Melbourne was an exception and did not greatly inspire his colleagues at other institutions to similar efforts. Nevertheless, the instruction itself was a powerful transfer medium. Within the universities nineteenth-century economics teachers were able remarkably effectively to acquaint their colonies' future leaders with a body of social doctrine which was in many ways more compact and easily comprehensible than the social science taught today. By identifying political economy with "moral" science, they could give to its conclusions an ethical message which persisted longer, if only in the conscience of students, than did mere analytical tools. The didactic power of the classical economic model, even when popularized and distorted far from the intentions of its creators, was great. Students left the colonial universities usually after only a brief encounter either with important works of literature in economics or with serious scholars in the field, but nevertheless, they proceeded to spread the economic gospel, or variants of it, through the legislative halls, the press, and even business life.

Through ubiquitous mechanics' institutes, literary and professional societies, and other progenitor adult education associations which flourished during the nineteenth and early twentieth centuries, university economists magnified their influence. In fact, the authorities of

these ancillary educational organizations were frequently more enthusiastic about economics than were the conservative non-economist academics in the universities themselves. Notably in Australia the bankers' associations, the Workers' Educational Association, and other similar extramural groups helped mobilize support for full inclusion of the social sciences in the university curricula.

Books and newspapers were the third major means whereby economic ideas flowed from Britain to its dependencies. In the nineteenth century the effectiveness of these media for the general spread of scientific doctrine was, for several reasons, much greater than it is at this time. First, British publications were viewed by nostalgic emigrants with a respect that approached veneration, and their pronouncements were accepted frequently almost as revealed truth. Works which had the widest influence were not only the classics of Smith, Malthus, and Ricardo, but included the popularizations of political economy by McCulloch, Harriet Martineau, Bastiat, and others. For a long time few local publishers could gain respect equal to that paid to books and periodicals from the old country, and colonial reprints of British works kept pace with the output of domestic authors. Colonial newspapers also deferentially reproduced extensive extracts from their British counterparts. As the nineteenth century went on and the proportion of native-born English-speaking population increased in the colonies, the influence of the local press and of American and continental writings grew, particularly upon radical thinkers. But with the exception of the works of a few outstanding authors such as Marx, George, and Bellamy, publications from other countries seldom gained the circulation or prestige of English works. Even in West Africa where the numbers of British residents and of literate natives were never large, the impact of the British press still was substantial.

A second reason for the effectiveness of published material as a transfer mechanism was that the printed word during the nineteenth century had for persons in relatively remote areas a near monopoly on the transmission of ideas, a fact difficult to comprehend in these days of simplified travel, radio, television, and films. The excitement with which newspapers and periodicals were awaited and then shared in isolated parts of Australia and Canada became proverbial. Local lending libraries, which have long since died out, then flourished, and political meetings and debates were embellished with a variety of literary allusion seldom heard today.

A third factor which gave special significance to newspapers and other ephemeral publications in particular as transmission belts of economic ideas was the extent to which during the nineteenth century economic ideas remained within the public domain for discussion. In contrast to the situation today when respected pronouncements resulting from analysis of complex questions in economic policy are reserved usually for a relatively small corps of professional economists, almost every liberally educated nineteenth-century man viewed himself as qualified to hold forth on the intricacies of tariffs, banking, land regulations, and a variety of other similar subjects. Genuine "experts" on political economy were particularly rare in the developing colonies, and adventuresome amateurs accordingly were exceptionally unrestrained. These enterprising and occasionally brilliant thinkers watched with excitement the periodical publications to which they had most easy access for new theoretical ammunition and description of relevant discussion elsewhere in the world. Colonial newspapers, libraries, and government publications all contained bountiful evidence of the widespread interest in sophisticated economic questions—both a large volume of derivative material from abroad and a variety of comment by local authors.

II

In this section the impact of imported economic ideas on major policy debates is outlined. There is one fundamental difference in analytical approach among the colonial areas which should be noted at the outset: in West Africa discussion of all social troubles was dominated by difficulties with climate and by strained cultural relations between natives and the British. In consequence, in Africa much more than in the other areas, economic problems were attacked with non-economic argument, and economic ideas must be viewed in a wider context. Even so, however, there remains remarkable similarity in scope of discussion, and comparisons between the different parts of the Commonwealth are useful. Policy issues which were of most widespread concern and were influenced by the transfer of economic ideas revolved around land disposal, monetary regulation, trade restriction, and generally the role of the state in economic development. In all areas, economic inquiry was most active in the periodic years of

economic crisis when residents were compelled to seek solutions to pressing problems with special vigor.

The theory of diminishing returns and its associated implications for land policy evolved in Britain immediately following the Napoleonic Wars, years which also brought depression, unemployment, and quickening interest in colonial development. One implicit corollary of the law was welcomed with excitement by colonists; this was that economic progress would tend to bring declining marginal returns over time both to capital and to labor, but would bring increasing returns to land, the single factor in fixed supply. The clear international dictate of this corollary, as far as most colonists and British "colonial theorists" could see, was that hard-pressed labor and capital should move to new countries where they could avoid scarcity and take advantage of the proportionately more abundant natural resources. This conclusion was reiterated regularly both at home and in the colonies as argument for assisted colonial growth.¹¹

Within the colonies themselves, classical rent theory had little specific guidance to offer. In particular, it failed to provide a prescription for settlement of their land, which was often relatively uniform in quality and either largely unoccupied or held by aborigines under some informal system of tenure. Ricardo's notion of progressive land use as a movement outward to less convenient and less fertile land¹² was simply not a meaningful description of settlement in new countries. Settlement on the North American and Australian frontiers was not related closely to changing levels of simple factor marginal productivity but was affected substantially also by such complex non-economic elements as the rapidity of exploration, social customs of the settlers, and the land hunger of most emigrants. The core of classical doctrine was not invalid in colonial situations as a few critics suggested; rather, it was incomplete as a predictive tool and therefore seldom useful as a guide to policy. Failure of classical theory to provide models which could encompass colonial institutions and conditions prevented colonists from understanding the theoretical implications of their own land problems and required them either to evolve pragmatic solutions

¹¹ The development of implications for colonization of classical theory has been described in Klaus E. Knorr, *British Colonial Theories, 1570-1850* (Toronto, 1944), Lionel Robbins, *Robert Torrens and the Evolution of Classical Economics* (London, 1958); Edward R. Kittrell, "The Development of the Theory of Colonization in English Classical Political Economy," *Southern Economic Journal*, XXXI (Jan., 1965), 189-206; and Donald N. Winch, "Classical Economics and the Case for Colonization," *Economica*, XXX (Nov., 1963), 387-399.

¹² *Principles of Political Economy and Taxation* (London: 1948), pp. 34-35.

without guidance from theory or to adopt makeshift policies from other countries.

In the new countries one land question which received much attention during the nineteenth century was how to treat landowners who failed to make use of potentially productive land either for speculative reasons or from an overestimate at the time of acquisition of their ability to cultivate. It was clear that by interposing blocks of wild country, absentee owners imposed distinct social costs upon their producing neighbors both by retarding the process of social growth and by limiting tax receipts. A number of policy devices were developed to deal with this evil, but the only serious economic analysis of the matter was made by the eccentric Canadian Robert Gourlay.

Gourlay carried out a rudimentary statistical investigation which indicated to him that in Canada land values and community prosperity were dependent overwhelmingly upon the density of population. He then concluded that for this reason government should make every effort to place people on the land and would be justified in penalizing holders of idle property. He rejected the currently popular practice of holding crown and clergy reserves of waste land against future contingencies and urged construction of developmental transport facilities to speed settlement. He advocated rapid sale of unsettled government land at market prices and taxation of the potential rent from unused private property to encourage its use. Gourlay's analysis and policy recommendations were in fundamental accord with the basic principles of the classical model of optimum resource allocation; his contribution was interpretative in showing the relevance of this general theory to the particular situation of a developing country.

Edward Gibbon Wakefield, one of the very few economists to acknowledge Gourlay's contribution, also proposed a land tax to eliminate waste land and encourage concentration. However, Wakefield added to Gourlay's remedy for misuse of national resources a proposal for a land tax at rates exceeding potential economic rent and land sales above free-market prices so as to create a landless labor force and an ample fund for support of subsidized emigration. Wakefield's scheme, which in contrast to that of Gourlay departed from the essence of classical doctrine, was greeted more enthusiastically at home than abroad. It owed little to first-hand analysis of real colonial conditions, and the theoretical justification for restriction of land use seldom made sense to settlers except on the ground of snobbish preference for old-

country institutions. Wakefield, they said, would duplicate the society of a crowded country by recreating artificially the crowded conditions. The policy was supported in the colonies mainly by special interest groups such as the Australian squatters.¹³

In one respect the specific predictive implication of classical distribution theory that an increasing proportion of national product would tend to flow over time to the owners of natural resources in fixed supply was greeted with greater alarm in some parts of the colonies than in Britain. Ironically, this alarm seems to have been based in part on a genuine misconception that high returns accrue to the factor in relatively great rather than scarce supply. As would have been expected, concern was most acute in the crowded urban cities where it was easy to undervalue the functions of capital and the entrepreneur in the staple-producing areas, and to categorize the total receipts of prosperous landowners as "unearned rent." Because of the inextricable connection between land and capital in the colonial economies and the endemic frustration of land-hungry city dwellers, advocacy of rent confiscation became one of the most popular methods of protesting against what were considered the monopolistic features of wealth.

The most successful media for transfer of ideas supporting confiscation of returns to land were the writings of John Stuart Mill, Henry George, and Alfred Russel Wallace. These works were distributed widely in public and private libraries, were printed in local editions, and were serialized in colonial periodicals. The specific policy prescriptions of a tax on land and nationalization of natural resources received full expression both in Australia and in Canada. In Australia, where the technology of agriculture discouraged small mixed farms and encouraged the growth of large cities, presenting a seeming paradox of artificial land scarcity in the midst of plenty, actions against landowners had wider appeal than in Canada, where viable western homesteads could be obtained from the government until well into the twentieth century. In Australia the impact of Mill, George, and Wallace was clear and lasting on political platforms and in actual legislation.¹⁴

A specific and urgent land question which arose in both Canada and Australia was whether the state as the original custodian of public land should encourage or control transfer into private hands. In this matter

¹³ *Canadian Economic Thought*, pp. 6-29, and *Economic Enquiry in Australia*, chap. iii.

¹⁴ *Canadian Economic Thought*, pp. 32-38, and *Economic Enquiry in Australia*, chap. iv.

colonists had little to learn from received economics in its uninterpreted state except the general injunction that all resources should be used most efficiently for the production of national wealth. Wakefield's advocacy of artificially "concentrated" settlement was neither demonstrably supportable nor easily transferable into policy. Rather, colonists had to depend heavily on the lessons of experience to provide guidance on such matters as the optimum size of homestead, the desirability of having the government provide essential services, and the terms of payments for land. After a mixed experience with large grants to individuals and companies during the eighteenth and early nineteenth centuries, both Canada and Australia decided to emulate United States precedent in disposing of land in part as free homesteads, and in part as incentive for private corporations to construct social overhead capital, mainly railways. Considering the overwhelming importance of these subjects to national development, it is noteworthy that they received almost no theoretical economic analysis.

In West Africa, it is difficult always to assess the impact of ideas on policy because of the limited volume of intelligent published comment by influential thinkers upon policy questions. A reason for this comparative silence on economic matters was the absence of responsible or even representative government, which would have given meaning to discussion. Furthermore, resentment among natives at their legislative impotence and at the open contempt of British administrators for their ideas encouraged unreasoned denunciation rather than constructive analysis.

British land policy in West Africa, a main cause of friction with native Africans, appears in part to have arisen from unimaginative attempts to follow blindly the dictates of classical principles in the face of unfamiliar institutions and an uncongenial environment. This policy had at least two aspects. The first was an attempt to categorize all land as either private or crown property. In this respect, failure to comprehend or even to investigate seriously the long-standing native practices of holding land in informal community led to frequent and unnecessary conflict over such questions as proposed forest reserves. A second source of conflict arose over attempts to impose direct taxation on native property; resistance was partly simple reluctance to submit to taxation without representation combined with skepticism about uses to which tax proceeds were put. But, as in the case of policies regarding land ownership, problems of land taxation were compounded by a

British willingness to approach colonial conditions deductively and categorically to impose solutions which had been devised for dissimilar situations and institutions.¹⁵

Significant discussion of monetary and banking questions, more than of any other set of economic topics, was dominated in all the colonies at least until after World War I by a relatively small group of bankers, merchants, and statesmen.¹⁶ The most influential statements on this subject were usually conservative in tone and colored by the mercantile self-interest of spokesmen. However, complex monetary questions were seldom understood clearly by laymen, and before the advent of professional economists, reasoned discussion was left usually to these "practitioners" and a few "cranks." Even the majority of colonial politicians and journalists, always among the most bold in attacking economic topics, viewed monetary matters with extreme caution. Major international monetary controversies of wide importance and relative respectability, such as conflict between the "banking" and "currency" schools, were mirrored in the colonies; but wilder heresies from abroad, such as justification of bank loans on real estate or unrestricted issue of irredeemable notes, were greeted usually with silence or ridicule. In both Australia and Canada monetary radicals did voice themselves regularly, but seldom with great distinction or warm response from a large audience. An important exception in Australia was short-lived but widespread and articulate enthusiasm, even among relatively conservative thinkers, for international bimetallism, which was viewed as a cure for declining worldwide price levels. Not until after World War I with the development of central monetary authorities did monetary and banking matters attract wide and disinterested discussion, and then from a new breed of economists teaching in the universities and working in business or the public service.

Ideas concerning the process of international trade flowed as easily from Britain to its colonies as did goods themselves.¹⁷ The theory of comparative advantage and the related concept of least-cost allocation among nations of productive industry became powerful and revered

¹⁵ Discussions of land policy in West Africa are contained in David Kimble, *A Political History of Ghana* (Oxford, 1963), pp. 16–21, 36, 59, 171, 306, 332–339; and Christopher Fyfe, *A History of Sierra Leone* (London, 1962), *passim*.

¹⁶ *Canadian Economic Thought*, chap. iii; *Economic Enquiry in Australia*, chaps. v and vi; R. Craig McIvor, *Canadian Monetary, Banking and Fiscal Development* (Toronto, 1958); S. J. Butlin, *The Foundations of the Australian Monetary System, 1788–1851* (Melbourne, 1953); and *idem*, *Australia and New Zealand Bank* (London, 1961).

¹⁷ *Canadian Economic Thought*, chap. ii, and *Economic Enquiry in Australia*, chaps. i and ii.

elements of colonial social doctrine which were widely known and accepted. For both native Britons and colonists alike these dicta seemed to contain injunctions as powerful as those in holy writ. The gospel of international free trade was carried far and wide by merchants who became a devout and zealous class of missionaries, combining personal faith in the truth of the word with strong self-interest in the result. Throughout incessant discussions of tariff change during the nineteenth century, merchants were vociferous in urging low rates; they repeated classical principles of political economy and incidentally caused these principles to be applied collaterally in other areas.

The main portions of the colonies in which protectionist ideas gained sway were areas in which autonomous industrial development seemed at least possible of success—central and eastern Canada and the more populous metropolitan centers of Australia. Apart from the seminal work of John Rae in Canada, protectionist arguments were based principally on the infant industry exceptions to free trade allowed by John Stuart Mill and the tracts of American and continental nationalists, especially those of Friedrich List. Protectionism gathered behind it an odd union of self-interested businessmen, fiery nationalists, and disgruntled opponents of the merchant community—groups whose sentiments and ideas on other matters were seldom in accord.

The doctrine of free trade was carried over from the international area, where it first became known, to a wide variety of other economic discussions in which it usually gave support to condemnation and rejection of the role of the state. The classical hypothesis of optimum resource allocation under free competitive enterprise was used as a powerful weapon against governmental interference in markets ranging from fish to finance. Most of the classical and neoclassical economists had not themselves, of course, formulated their models of a free economy without careful qualifications and exceptions; but the simple outlines rather than the fine points of the theoretical system migrated most successfully. The basic virtues of the free price system, production and distribution in response to personal initiative and contribution, were given a high moral tone and took an important place in the prevailing social philosophy.¹⁸ The potential gains from spontaneous

¹⁸ For evidence of a similar carryover in the United States, see Joseph Dorfman, *Thorstein Veblen and His America* (New York, 1934), *passim*; and *idem*, *The Economic Mind in American Civilization* (New York, 1959), III, chap. iii.

human co-operation and unrestricted economic activity were used effectively as an argument against state support of railways and developmental works, control of monopoly and external diseconomies, nationalized banking, and a variety of other government programs. Colonists who argued in support of government activity lacked adequate contradictory economic theory to explain how the growth process could be accelerated by the projects they recommended, and they were compelled usually to fall back upon appeals to experience or vague intuition. It was understandable, but unfortunate for the colonies, that economic theory in Great Britain developed to its highest point as a schema to explain how a relatively advanced economy could maximize consumer satisfaction operating at one moment in time. Much of the growth theory we accept today was anticipated in classical writings, but generally it was not reproduced by popularizers of the classics, and it lay in the shadow of the great system of static analysis.¹⁹

Classical economics could shed little light on many of the main policy problems of Canadian or Australian staple production or on the modernizing process in the primitive pre-industrial economies of the Gold Coast and Sierra Leone. But what is worse, the simplified static model as it was imported to the colonies may actually have misguided policy makers and inhibited progress. Certainly, many of the great surges in Australian and Canadian economic growth which resulted from the imaginative combination of government and private enterprise were or would have been rejected by static analysis; in particular, there seemed no way to predict or account for the occurrence of major cost-reducing innovations. In some instances, such as the construction of Australian railways, there is evidence that vigorous application of static theory may actually have retarded the extension of vital social overhead capital.²⁰ In West Africa the impact of economic theory on policy was less direct, but the static model had similar effects. Because at any moment in time costs and conditions for internal African development could be viewed as implying unprofitability, classical theory provided support for the official policy of inaction.

In Australia, continental and American radicalism had an impact on economic ideas and policy which was unmatched in the other colonies. Rapid metropolitan growth and heavily capital-intensive staple produc-

¹⁹ Classical growth theory is discussed in Bert F. Hoselitz, *et al.*, *Theories of Economic Growth* (Glencoe, Ill., 1960), *passim*.

²⁰ *Economic Enquiry in Australia*, chap. viii.

tion gave Australian radicals an opportunity to apply revolutionary theory which had been formulated principally for older nations. A warm reception was given to radicalism in Australia in the country as well as in the city; landless workers and their sympathizers throughout the economy saw exploitation rather than mutual benefit as the essential feature of free enterprise. Australian radicals generally were remarkably eclectic in their adoptions; they took universally to their bosom such divergent thinkers as Karl Marx, Pope Leo XIII, Ferdinand Lassalle, William Morris, John Ruskin, the Fabians, and Edward Bellamy. Despite steady ferment, Australia did not herself produce any major radical thinkers. The vigorous activity of social critics did, however, lead in turn in Australia to frequent and elaborate countervailing statements of the virtues of free enterprise.²¹

In Canada, in contrast to Australia, deep social resentment was reserved more for natural forces, southern neighbors, inhabitants of another region, or special interest groups than for economic classes designated by such epithets as "capitalist" or "rentier." The occasional agrarian risings which did take place in Canada were rooted more in ill feeling against the merchant community or in friction among the ethnic groups than in deep concern about the essential character of the economic system.

III

The single outstanding characteristic of the earliest indigenous original economic thinking in all three of the Commonwealth areas under examination was a concern with historical, empirical, and institutional data. At least two explanations can be suggested for this uniformity of pattern. First, colonists in all three regions became disillusioned rapidly about the possibility of profiting substantially from the literal transfer to their peculiar environments of economic theory developed in Great Britain, and they turned naturally for guidance to inductive investigations of the facts of their own situations. Second, the theory of political economy during the nineteenth century became associated so firmly in the public mind with doctrinaire adherence to *laissez faire* that persons who wished to examine economic questions without identifying themselves beforehand with this policy

²¹ *Economic Enquiry in Australia*, chaps. x and xi.

were compelled to dissociate themselves entirely from the deductive approach.

In Canada native empiricism took the form predominantly of interest in economic history. This began with the pioneer works of Gourlay and Rae, who set out to advance economic theory by making generalizations from observation of local conditions. But studies in economic history came into full flower in the works of early university teachers. In particular, James Mavor and William Ashley, two immigrant Britons, established firmly at the University of Toronto a paramount preoccupation with historical economics which led to the work of Harold Innis and the "Toronto School" of economic history. The "staple theory" of economic growth, postulated by Innis and his colleagues after an extensive historical study of the Canadian economy, has remained probably the most distinctive innovation in economic analysis to come from Canada.²² The tradition at Queen's University, introduced by Adam Shortt and O. D. Skelton, of economics related closely to the other social sciences and to government service was also based firmly in history. It is revealing to note that the few distinguished early representatives of English theoretical economics who came to Canadian universities, such as A. W. Flux at McGill, made relatively little lasting impact.

The historical and empirical tradition was as strong in Australia as in Canada. David Syme, the influential editor of the *Melbourne Age*, was also the chief colonial exponent of views made popular by the German historical school of Roscher, Knies, and Hildebrand;²³ his advocacy of protection and land reform was rooted in a concept of national growth which transcended the economics of optimum allocation and least cost. Even W. E. Hearn at Melbourne University, who stood in opposition to almost all of the policies upheld by Syme, turned hopefully to history in his study of the "Aryan Household."²⁴ Charles H. Pearson, Hearn's successor for a brief period at Melbourne, linked cleverly the implications of the classical model with a reading of contemporary history in his highly successful *National Life and Character*.²⁵ Sir Anthony Musgrave, writing from South Australia,

²² *Canadian Economic Thought*, chap. vi. For more on this point, see W. T. Easterbrook, "Trends in Canadian Economic Thought," *South Atlantic Quarterly*, LVIII (Winter, 1959), 91-107.

²³ For a full exposition of Syme's career and writings, see J. A. La Nauze, *Political Economy in Australia: Historical Studies* (Melbourne, 1949), pp. 98-135.

²⁴ *Ibid.*, pp. 45-97, and W. E. Hearn, *The Aryan Household* (London, 1879).

²⁵ (London, 1893).

provided penetrating critiques of classical theory from his own experiences in several colonies.²⁶

Australia was known first to social scientists around the world for its succession of remarkably capable pioneer statisticians: in particular, Henry Hayter, Timothy Coghlan, R. M. Johnston, and George Knibbs. These men and their followers all were actively interested in economic questions, and with sympathy and support from their governments they attempted to provide answers by collecting, processing, and interpreting economic data. Especially in the areas of vital statistics and national income estimates the Australian statisticians were pathbreakers. Their work was both useful in itself, and for the strong stimulus it afforded others to make innovations in theory and policy. In part from perusal of Coghlan's income estimates, Alfred De Lissa in Sydney was led to one of the earliest formulations of the income multiplier, and much of the elaborate system of wage regulation built up in Australia rested on the price and income data provided to arbitrators by the statisticians.²⁷

In West Africa the most interesting early writing on economic questions was, like that in Canada and Australia, both institutional and historical. Because of limitations in the available data, much of the work was more descriptive and impressionistic than rigorously empirical. The most important writers were a succession of journalists and professional men who, in part unconsciously, maintained a remarkably consistent attitude toward the problems of West African development. Beginning with the leadership of James Africanus Beale Horton and continuing with J. Mensah Sarbah, J. E. Casely Hayford, Edward Wilmot Blyden, and others, writers on the Gold Coast and in Sierra Leone called for and attempted themselves to provide serious analysis of the impact on national development of various indigenous native institutions.²⁸ Their work, although concerned fundamentally with

²⁶ *Economic Enquiry in Australia*, chap. xiv.

²⁷ *Ibid.*, chaps. xi-xiv.

²⁸ Representative works by West African authors which contained comment on economic matters are: S. R. B. Attoh Ahuma, *The Gold Coast Nation and National Consciousness* (Liverpool, 1911); Edward Wilmot Blyden, *The People of Africa* (New York, 1871), *idem*, *The West African University* (Freetown, 1872), *idem*, *Christianity, Islam and the Negro Race* (London, 1888), *idem*, *African Life and Customs* (London, 1908); J. B. Danquah, *Gold Coast: Akan Laws and Customs and the Akim Abuakwa Constitution* (London, 1928); J. W. De Graft Johnson, *Towards Nationhood in West Africa* (London, 1928); J. E. Casely Hayford, *Gold Coast Native Institutions* (London, 1903), *idem*, *Ethiopia Unbound* (London, 1911); James Africanus B. Horton, *Political Economy of British Western Africa* (London, 1865), *idem*, *Letters on the Political Condition of the Gold Coast* (London, 1870), *idem*, *West African Countries and Peoples, Vindication of the African Race* (London, 1868); H. H. Lardner, *The Agricultural and Commercial Problems in Sierra Leone*.

economic questions, dealt with subjects customarily considered to fall within the province of sociology, anthropology, psychology, law, and political science. In this breadth of approach, these early West Africans anticipated modern eclecticism in discussions of economic growth. In particular, they offered convincing arguments that rather than inhibiting growth such longstanding native institutions as polygamy, communal ownership of property, domestic slavery, and the Islamic religion could have significant value, at least transitionally, in achieving national progress. These native Africans found quickly that they could derive from imported economic theory even less than could Australians and Canadians in gaining an understanding of their economy, and their move to institutionalism was the most complete of the three colonial areas examined here.

In this study of international flows and patterns of economic thought, it has been suggested that in the development of economic systems throughout the Commonwealth migratory economic ideas played a vital role. Conditions of transfer were complex, affected by origin, medium of transport, and receptivity of recipient. In one way, economic ideas were like fine wine—the best did not often travel well. Nevertheless, on balance colonists did put the ideas they received to extensive use, and by the addition of information gained from history and institutional study adapted the method of economic inquiry to their many pressing needs.

(Sierra Leone, 1893); Samuel Lewis, *The Agricultural Position of Sierra Leone* (Liverpool, 1881), *idem*, *A Few Suggestions of the Wants of Sierra Leone* (Freetown, 1885); John Mensah Sarbah, *Fanti National Constitution* (London, 1906); Thomas J. Sawyerr, *The Sierra Leone Native Church* (Freetown, 1888).

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